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"O FORTUNATOS NIMIUM SUA SI BONA NORINT
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EDMUND RUFFIN, OF VIRGINIA, AGRICULTURIST,

EMBRACING A VIEW OF AGRICULTURAL PROGRESS IN VIRGINIA FOR THE LAST THIRTY YEARS.

[*From De Bow's Review.*]

The subject of this sketch was born January 5, 1794, in the county of Prince George and state of Virginia. In youth and throughout life he has suffered much from a feeble constitution and delicate organization. But neither his debility nor the delicacy of his structure has prevented the most untiring industry in whatever interested him, and the exhibition of an energy, physical and intellectual, which would seem to have required a strong frame, and a powerful nervous system.

His father, a gentleman of fortune, afforded him all the opportunities for a most liberal education; but he was a little erratic at that period, devoting himself sometimes with great diligence to his studies, and sometimes utterly neglecting them. Yet he was always fond of intellectual pursuits, and though his text book may have lain unopened, he was still occupied, and most frequently, with history, fiction or general literature. As he read for amusement and not improvement, fiction engaged much of his time. In the sixteenth year of his age he was sent to William and Mary College. At first he applied himself with assiduity, and advanced with great rapidity. He was especially successful in geometry, for which he manifested much fondness and a decided talent. The first examination was passed by him with distinguished credit.

But soon he relaxed in his studious habits, and was finally suspended from the institution for continued neglect to the duties of his class.

His father being now dead, he was left by an easy guardian to the indulgence of his own tastes and disposition. He returned home to a kind stepmother, without any definite object in view, or any determination of what should be his future career in life. But war had now been declared with Great Britain, and at the first muster at which he was enrolled, having reached the military age of eighteen, enlisted in a volunteer company, and soon after entered on active service. He marched with the first regiment called out from Virginia in the town of Norfolk, and served as a private from August, 1812, to Feb. 1813. He then returned home, and was permitted by his guardian to take possession of his estate. In the division of his father's land he had received, as his share, the farm called Coggin's Point, situated in the County of Prince George, and on the waters of the James River, and now celebrated throughout this state from the extraordinary improvements made there by Mr. Ruffin. He entered with industry and enthusiasm into the practical business of agriculture. Yet he did not suffer this occupation to monopolize his attention, for before the end of the year he was married.

Agriculture in Virginia had then reached its lowest point of depression. Under the exhausting system of cultivation, which had prevailed from the first settlement—a system which was truly a systematic destruction of the country—adopted in the first instance by emigrants, in order to obtain the largest immediate profit, and who were utterly regardless of its ultimate effects, and continued by their descendants, when the same cause which had induced it had ceased to exist, the land, for the most part, no longer paid the expenses of cultivation. As a patient who has undergone a long and rapid process of depletion, and has little blood left to yield to the Sangrado practitioner, such was the tide-water section of Virginia. With such culture—such impoverishment—and the prospect of a population thus situated, society was rapidly declining. It was well said by Mr. Ruffin, in an address to the people of his county, that at that time—

"Almost every man was growing poorer, or the prospects of his family becoming worse. The grade of society had been, and still continued to be, on the decline. The proprietors having no hope of the improvement of their lands, or of being remunerated for ever so great industry and devotion to their business, thought it as well to bestow very little. Accordingly, like the inhabitants of a city ravaged by the plague, they thought more of present enjoyment than of providing for future wants; and there prevailed generally, habits of idleness and improvidence, of pleasure-seeking, and neglect of business, with all their necessary consequences." The population fled from the country to seek a better fortune in the distant West. He continues: "There was scarcely a proprietor in my neighborhood, and deriving his income from cultivation, who did not desire to sell his land, and who was prevented only by the impossibility of find-

ing a purchaser, unless at half of the then very low value. All wished to sell—none to buy. If a stranger had been inclined to settle among us, he might have chosen almost any farm in the county, and would scarcely have failed to find the owner glad to sell, and at a low price."

The county of Prince George differed but little from all the lower part of Virginia. There seemed no refuge from poverty but emigration. Many of the aristocratic mansions of this hospitable and generous population were now abandoned in silence and ruin, and the former inmates, with the remains of their dilapidated fortunes, made their melancholy way to the wilds of the West. Many a field which had descended from generation to generation of the same stock, for long years, and which had offered to successive heirs green prospects and rich harvests, now thinly clad in broom-straw and the tiny hen grass, was given up to the encroaching forest.

In this state of things, the subject of our sketch entered on his career as a farmer. He was totally inexperienced, and had no knowledge, either theoretical or practical, of his business. But in this he differed but little from older men of this period in Virginia. He gave himself up with enthusiasm to his pursuit, labored most industriously, yet labored in the dark, and, of course, often went astray; sometimes in pursuit of one "ignis fatuus," and sometimes of another. He saw clearly that the prevailing systems and practices of culture were wrong, and wandered from experiment to experiment to discover what was true. Often mistaken in views adopted "a priori," he soon tested them by careful experiment and rigid induction. Many investigations, thus pursued for a series of years by one whose logical power equalled his industry, naturally and inevitably led to great results. "Labor vincit omnia," says the Mantuan farmer.

The estate of Coggin's Point was, at that time, extremely poor, the larger part not averaging more than ten bushels of corn per acre, nor more than six bushels of wheat, on the better half of the land. Bordering it, on the river, was a tide-marsh of 300 acres, covered by water when the tide was up, but left free when the tide was low. One of the first of Mr. Ruffin's experiments was to reclaim this part of the marsh. He limited his efforts to about 32 acres, the most favorably situated, as he believed, to ensure success. After five long years' exertions, he succeeded in draining this small section, and bringing it into good culture. It produced three very large crops of corn, then three others, less and less in quantity, when the vegetable soil had so rotted away, that the level of the land was now too low for cultivation, and it was abandoned to its former element. Such has been the fate of every effort of a similar kind on soils of a similar character.

About the year 1813, Col. John Taylor, of Carolina, published his "Arator." It was received with enthusiastic eclat. There was a general belief that he had discovered the great secret of improving Virginia soils, and many anxious farmers now rejoiced, as the tempest-tossed sailor on the first sight of land after a perilous voyage. Here was presented a cure for their misfortunes; they might remain in their old homesteads and retrieve their shattered fortunes. The principal feature in his system was the protection of the land from grazing, and making the vegetable serve as manure. Another, and secondary idea, was to throw the land into high beds, in cultivating the corn crop, by deep ploughing. Mr. Ruffin became an ardent admirer of "Arator," and adopted his opinions and precepts. He had not yet learned, that the inorganic elements of soils, the mineral ingredients, are often deficient, and sometimes one or more are exhausted by cultivation, sometimes not furnished by nature to the virgin lands, and that their vegetable growth will not furnish them. He at once carried into practice the new idea, and subjected them to the test of experiment. For four or five years he used all the means of improvement recommended, and found them, as he states, "either profitless, entirely useless, or absolutely, and in some cases, greatly injurious."

What then was to be done? He was not the man to despair, save in a desperate case. But circumstances seemed singularly to concur in establishing the belief that any permanent improvement was hopeless. Putrescent manure, when applied, disappeared in the course of two or three years, and left not a vestige behind. The country seemed destined to sterility. Indeed, Nature had made barren a great portion of the tide-water country, and her decree was irreversible, with the present elements of the soil. The virgin land, when first stripped of the primeval forest, would in many localities scarcely pay the expenses of cultivation. And yet this soil had received the dropping foliage and the decaying timber from the time of the flood. It is not too much to say, that 100 feet in depth of putrescent matter had been piled on its surface, and had rotted there in the lapse of years, and yet the soil had remained still poor. In this exhibition of Nature herself, was found an answer to Col. Taylor's theory. An application of vegetable matter might restore the soil to its original productiveness, but no more. To make an improvement beyond this point, some change must be made in its mineral constituents.

But at that period little was known in this country of the science of agriculture. The investigation of its chemistry had just commenced in England by Sir H. Davy, who had entered as a pioneer the vestibule of the science, and raised his torch to dispel the dense darkness which had thus far enveloped the whole subject. While Mr. Ruffin was meditating on the last remedy for sterile lands,—removal to the West—he received a copy of Davy's "Agricultural Chemistry," which had been just published in this country. He read it with peculiar interest, though not acquainted with chemistry. It was obvious that, at least, the true philosophical mode of examining questions of agriculture had been reached. In the perusal of this author, there was one statement which appeared to afford some hope. As an illustration of the chemical defects of land and their remedies, he adduces an example of a soil of good apparent texture which was sent him from Lincolnshire by Sir Joseph Banks, as remarkable for sterility. Upon analyzing it, he found it contained sulphate of iron, the copperas of the shops; and he offered the obvious remedy of top-dressing with lime, which converted the poisonous substance into a manure.

It occurred to Mr. Ruffin that the soils of his section might be like the specimen of Sir Joseph Banks. They were of "good apparent texture," and they were sterile, and they always had been so. Putrescent manure made no permanent improvement. Might not the same poisonous substance exist in them? He immediately applied a

proper test, but it disclosed no sulphate of iron. This supposition, then, must be abandoned. But might not some other substance, equally deleterious, exist? Might there not be some acid? He was induced to present this question to himself, and to incline to believe the affirmative from several circumstances. He says:

"These were, first, that certain plants known to contain acid, as sheep sorrel (the rumex acetorus) and pine, preferred these soils, and indeed were almost confined to them, and grew there with luxuriance and vigor, proportioned to the unfitness of the land for producing cultivated crops. Second: That of all the soils supposed to be acid, which I examined by chemical tests, not one contained any carbonate of lime. Third: That the small proportion of my land, and of all within the range of my observation, which was shelly, and of course calcareous, was entirely free from pine and sorrel, and moreover was as remarkable for great and lasting fertility, as the land supposed to be acid for the reverse qualities. Shells or lime would necessarily combine with and destroy all the previous properties of any acid placed in contact; and therefore, if acid were present universally, and acting as a poison to cultivated plants, it seemed plain enough why the shelly lands were free from this bad quality, and by its absence had been permitted to grow rich and continue productive. Still I could obtain no direct evidence of the presence of acid, either free or combined, by applying chemical tests to soils, nor was there any authority in my oracle, Davy's 'Agricultural Chemistry,' nor any other work which I had read, for supposing vegetable acid to be present in any soil."

But without any authority from chemistry, and in spite of his own failure to detect any such element in soils, by means of the imperfect analyses which he attempted, he felt a very strong confidence that such did exist, and that it was the cause of the sterility of the lands and their incapacity for durable improvement. If his views were true, lime furnished the appropriate remedy. Fortunately, the beds of fossil shells which underlie nearly all the tide-water section of Virginia and the adjacent states, presented the material at hand to test the truth of his theory.

He began operations in February, 1818, and applied between 125 and 200 bushels from one of these beds per acre, to 2½ acres of land. His anticipations were sanguine, and he watched with anxious interest the progress of the experiment. The marl, as it is commonly called, contained 33½ per cent of carbonate of lime. The land was planted in corn, and when the plants were only a few inches high, their superiority over the adjacent corn was manifest. This continued and increased as the crop advanced, and when the corn was gathered, it was found that the increase was fully forty per cent. That of the wheat crop, which succeeded, was still more. This success on a small area was followed by extensive applications of marl from year to year; and each application testified to the truth of his theory. The acidity of the soil was neutralized, the acid plants and acid pines disappeared, the land improved from year to year. The lime afforded food to the plants, medicine to the soil, and gave permanence to the manures. The retentive capacity which had been inferred from the fact that the most fertile and durable soils known were highly calcareous, was manifested by the marled land, more and more clearly each succeeding year. Mother earth changed her face, and changed her constitution, under the healing influences of this salutary medicament, and now presented an appearance as different from her former self, as the healthy and robust man from the lingering and hectic victim of consumption. Verdant fields and abundant harvests were the monuments of his discovery. Broom-straw (andropagon) and poverty grass (aristida gracilis) gave place to luxuriant clover, and a poor, thin and stunted vegetation disappeared from the now smiling landscapes.

When Archimedes, in his bath, discovered that a body immmersed in fluid loses as much in weight as the weight of an equal volume of the fluid, and detected by means of it, how much alloy an artist had fraudulently added to a crown, which King Hiero had ordered to be made of pure gold, he is said to have been so overjoyed, that "accoutred as he was," he plunged into the street, crying "Eureka, Eureka, Eureka!" Dr. Rittenhouse, when he saw the transit of Venus over the sun's disc, fainted with excitement. Dr. Franklin, when he discovered with his little kite the identity of lightning and electricity, is said to have experienced emotions of great intensity. The Virginia farmer had greater cause for rejoicing, excitement and exultation than either, for he had not only extended the boundary of science, but had made a discovery which added millions to the productions of his country—which would arrest the declining fortunes of his state—which would feed the hungry, give comfort to the indigent, and afford the means of improving the condition of thousands of his race.

In 1818, Mr. Ruffin made a communication to the Prince George Agricultural Society on the subject of his discovery, which formed the basis of his work entitled "An Essay on Calcareous Manures;" published in 1832. It is to be regretted that the limits of this sketch will not permit the insertion here of that communication. It is the nucleus of the essay. In the latter production, the principles maintained, and which were then for the first time promulgated in an independent work, and supported by facts and arguments, are the following:—

1. The capacity of soils for being enriched permanently by putrescent manures is only equal to their original or natural degree of fertility.

2. The absence of carbonate of lime almost universally in the soils of the Atlantic slope of Virginia, and by inference of most of the other states; and most frequently even in what are called limestone soils.

3. The general presence of some vegetable acid in all the naturally poor soils in the district above referred to, acting as a cause of sterility.

4. The application of carbonate of lime to neutralize the acid, and by that and other effects to prepare the land for speedy and profitable improvement.

These principles were maintained with great ingenuity and ability, and made their way rapidly into public favor. They are now generally received as true, and form the basis of agricultural improvement throughout the extensive section of country for which they were intended. The chemists have detected humic acid in the soil; carbonate of lime is acknowledged to be generally wanting in the slope of the Atlantic states; and it is equally admitted that a considerable mixture of the calcareous element is an essential ingredient in all fertile and durable soils.

The Essay was soon eagerly sought—everywhere

discussed—and wrought a powerful effect on the convictions and practices of the proprietors of Eastern Virginia. It passed through three editions. Though the cultivators of the soil are proverbially slow in changing their usages, in this instance the new ideas were rapidly diffused, and, in a short time, large numbers were engaged in marling.—Men who before had made only a few hundred dollars from their annual crops, were now found counting up their thousands. Agriculture had become profitable—a prospect was presented of comfort and wealth to the farmers of the country; energy and enterprise succeeded to indolence and idleness, and now it was no longer necessary to look for homes in the western forests for themselves and their descendants.

In an appendix to the "Essay on Calcareous Manures," is an extract from the journal of the Coggin's Point Farm, showing the annual crops made from 1813 to 1842. From this source we learn, that in 1818, when the first experiment in marling was made, the crop of wheat on that estate was 450 bushels, and that of corn, 2,670 bushels. In 1843, the product of wheat was 4,725 bushels; that of corn, 4,675 bushels. The quantity of arable land in the beginning was 472 acres, but this was afterwards increased, by clearings of extremely poor land, to 632 acres, which diminished the general product per acre.

In continuation of these details of success, we avail ourselves of the most reliable information to present some evidence of the increase of products on the Marlbourne estate, on which Mr. R. now resides. This land is, for the most part, an alluvial flat on the shore of the Pamunkey, originally fertile, but reduced by injudicious tillage to a state of great impoverishment. In 1844 Mr. R. removed to this estate. We are informed that the ordinary crop of wheat, for a considerable time previous, did not exceed 1,000 bushels, but we have no information as to the corn. In 1845, after an application the year previous, of 67,875 bushels of marl, the crop of wheat on 134 acres, was 1,977 bushels; that of corn on 112 acres, 1,600 bushels. In 1848, after the lapse of only three years, the wheat crop reached 5,127 bushels on 254 acres, and that of corn, 3,080 bushels on 106 acres. This vast improvement—much more than a duplicate of product, indeed, nearly triple—was effected without any other fertilizing substance but the marl, the manure furnished by the crops and clover sown upon the land. The profits upon this estate, including price of land, labor, stock, and everything necessary to its cultivation, were in '47, within a fraction of 23 per cent. on the whole investment; in '48, a little upwards of 20 per cent. Nothing being said in this estimate of the increase in the value of the farm, which is, certainly, now worth three times as much as it was four years ago.

It is necessary now to go back and make some reference in this sketch to the labors of Mr. Ruffin, of a different character, though this reference may be a mere synopsis.

He has the honor or the misfortune, according to the different opinions of the two political parties, of having been the author of the first popular effort to resist the restrictive system, or the system for the protection of domestic industry, as its friends loved to designate it. He conceived and organized a plan for the formation of an extensive and numerous association of county agricultural societies, to protect the rights and interests of agriculture, as well as to promote its improvement. In 1818, the society was formed in his own county. The affiliated societies presented to Congress, in the session of 1819-20, the first petition ever offered against the protective policy. This fact and the novelty of a remonstrance on the part of the agricultural interest, produced a profound sensation at the time. There was then no appropriate committee to whom it could be referred, and the Committee of Agriculture was for the first time established and took charge of this petition. That session, the bill for increasing the protective duties of 1816, was lost in Congress by one vote only. The next session the societies again presented their united remonstrance; and the third session, in a petition prepared by Mr. Ruffin, they asked a reduction of the duties on imports to the revenue standard.

In 1824, Mr. Ruffin was elected to the senate of Virginia, and remained in that body for three years, when he resigned his place and abandoned political life. With too much of patriotism and rigid unbending principle to be a supple partizan, he has ever had but little kindness for either of the political parties which divide and distract our country. He has freely denounced both, when wandering, as he believed, from those principles which should control the government of this confederacy. It can never be said of him, as of Burke, that he "to party gave up what was meant for mankind."

In 1832, Mr. Ruffin engaged in the publication of a new agricultural periodical, called the "Farmer's Register," which was well received and sustained by the public. It was a journal of a high order of merit, edited with ability, and numbered among its contributors many of the ablest men of the South. In form, size, as well as substance, it rather resembled the English Quarterlies of agriculture than any paper among us at present devoted to this subject. It exerted great influence in diffusing rich stores of scientific and practical information, and particularly in extending the use of calcareous manures. Virginia, Maryland and N. Carolina are much indebted to this work for the amelioration of their systems of culture, and the great advance they have made upon their former modes of cultivation and the present general prosperity of the farmers of these states. Their energies were aroused and lethargy dispelled by the pictures presented of the results of judicious agriculture, and facts demonstrating the large profits to be made in this department of business. The noble science of agriculture was exhibited in all its attractions, and intellect and taste were enlisted in its development and practice. He conducted this journal for ten years, when he left it, and soon after it expired.

While engaged in the "Farmer's Register," he published, for a short time, a periodical of another kind, but intimately connected with the interests of the cultivators of the soil. This was the "Bank Reformer," devoted to an exposure of the defects of the banking system of the state, and a bold and imposing denunciation of what he believed to be its corruptions.

In 1841, he was appointed a member of the "Board of Agriculture," established by a law of Virginia, and became its secretary.

From this position he retired upon being appointed Agricultural Surveyor of the State of South Carolina. This appointment, conferred most unexpectedly by a state in which Mr. Ruffin had

scarcely any personal acquaintance, was highly flattering and honorable to him; and he determined to accept it, though at great inconvenience and loss. The appointment was for two years, but he would only consent to take it for one; and as the labor for so short a period could not possibly be sufficient for one-twentieth part of the important subjects claiming investigation, he directed his efforts for the most part to discovering and examining the beds of marl and other calcareous deposits, and urging their use upon the people of the state. The marl was abundant beyond all expectation, and universal ignorance prevailed of its value.—After spending a laborious year, and making an extended and valuable report, he closed this career and returned to his family.

He then removed to his farm at Marlbourne, which had been purchased for him by his directions during his absence, and commenced those rapid and remarkable improvements, of which some little information has been already given. He here has had green sand marl with which to improve his land, a much more fertilizing and valuable substance than that at Coggin's Point. He now lives in the midst of his devoted family, still ardently engaged in his favorite pursuit, with his energies unrelaxed, and a vivacity and activity remarkable in one of his age.

He has seen his efforts crowned with success. It is principally due to his exertions that Virginia is going through a process of rapid improvement, such as has been rarely, if ever before, witnessed. Emigration has for the most part ceased; her sons may now find abundant sources of prosperity at home. The census of 1850 shows an increase in the value of the lands of Eastern Virginia since 1837 of 23 millions of dollars. Nor is even this amount a fair estimate of the real enhancement. The high price of labor, regulated by the southern markets, keeps down the profits of the farmer upon the capital invested, and, of course, depresses the value of the lands.

In an address of Mr. Ruffin to his friends and neighbors of Prince George, in 1843, who had assembled to do him honor in the presentation of a service of plate, he contrasts their present condition with what it was twenty-five years before.—The former part of the picture has been before adverted to in this sketch; in the latter part he says—

"In all of this, my old neighborhood, and, so far as I know, through the whole county, not one individual, after beginning to marl, has emigrated or desired to emigrate." "The prices of lands here have greatly increased, though less than their true value. But I know not how to estimate the rate of increase, because sales are now more rare than ever formerly, though for the opposite reason. Then it was that nobody would buy; now, nobody will sell.

"I know nowhere a more industrious and steadily thriving community than is exhibited in the present occupants of these lands. Among them, I believe, it would be difficult to find a young land holder who is not attentive to his business, industrious, and thriving in his operations; and if seeking pleasure less than his predecessors, finding it far more successfully in steady attention to the cultivation and improvement of his farm. And this change, and all the results and benefits, economical, social and moral, are mainly owing to this one circumstance, that every man has now presented to him, in certain prospect, a full and sure reward for his labors." What is here affirmed of the county of Prince George, is, to a very great extent, true of all Virginia below the mountains.

Mr. Ruffin has thus enriched his state by his labors—enriched his friends, his neighbors and himself. His indelible impress is made on Virginia, and time must strengthen it. His monument is truly more lasting than brass, for it is the soil of his state. He has cause to be conscious that he has deserved well of his country. His memory will be cherished with gratitude, when many of those who occupy so much of the public attention, and who are ever parading before the popular gaze, shall cease to exist in the recollection of man, when their evanescent honors shall have passed away with the excitement that gave them birth, and, like the consumed candle, their light shall have vanished forever.

Varieties of Pears.—"More than 800 kinds have been tried in this country, not one-twentieth of which are worthy of cultivation, unless one would spend his time and money in experiments. Most of these varieties are from Europe, and after all that has been done to ransack that vast country in search of new fruits, *native* pears of this country, far more valuable, have been neglected; some have flourished and disappeared, leaving not a trace behind. Scarcely a foreign pear can be found that has not some defect in tree or fruit, in orchard culture,—even the famous *Bartlett* was much injured by the winter of 1847-8. *Beurre Diel* seldom comes to perfection. *Napoleon, Easter Beurre, Duchess de Angouleme, Maria Louise*, and many others often fail by not ripening well, yet we have some foreign pears of the greatest excellence, particularly for mild climates, and for warm locations in the north."

"We have a number of fine *native pears*, and are getting more, and there are many even old trees, that have not yet been made public. Almost every year we collect some valuable native, and now have a number of new kinds on trial, that are very promising but not well tested."

"Amateurs have done much by the introduction of foreign pears, but some have compromised this advantage, in some measure, by too hastily recommending numerous kinds that are comparatively worthless, which has led to disappointment and discouragement. *More attention to our best native pears* will lead to improvement, and a fair trial of foreign kinds by exposure in orchard culture, should *precede* their recommendation for general use."—*Cole's American Fruit Book.*

Netting.—We would call the attention of tobacco and fruit growers, and gardeners, as well as fishermen, to the advertisement of Mr. M'Mullen. The netting made by this machine, (which attracted so much attention at the Mechanics' Fair in this city, where it was awarded the highest honors of the Institute,) will be found far better adapted than that made by the old method, for the purpose of protection from the frosts, of early vegetables, &c. and of berries, from birds—Netting is extensive y used in England for these purposes, where its advantage is well known. By the wonderful machine of Mr. M'Mullen, it can be furnished at a very low price, and if carefully put away after use, each season, will last for years.

Guano—Prices are without change; several cargoes have recently arrived, and the supply is...

WORK FOR THE MONTH.

MARCH.

Presuming that our readers have, by this time, not only arranged their systems of culture for the season, but that they have been well considered before adoption, we shall proceed to point out such matters as should claim attention during the month. But before we do so, we will express the hope that none may have marked out a breadth of acres for spring culture, whose dimensions are so large as to forbid the possibility of rendering justice to their several crops. And now for the work

On the Farm.

Oats.—As in many of the States in which our journal circulates, the time has arrived for seeding oats, we shall, in the first place, refer to our remarks of last month, *upon the subject of the appropriate manures* for this crop; and, *secondly*, observe, that, as *the time* of sowing must be governed by location, there can be no such thing as prescribing a particular day, as what might be too early in one state, would be late in another, or even in different parts of the same state. As a general rule, it may, however, be laid down, as beyond all question, that the early sown oats produce the largest, and best, crops of grain. Therefore, acting upon this fact, we recommend to all, to seed their oats, so soon as the frost is out of the ground, and the land may be in a condition to be ploughed without detriment, and put in first rate order; for we hold it to be a truth, which none can gainsay, that no crop should be committed to the earth unless the soil has been deeply, thoroughly, and nicely prepared. Rough culture is a mark of barbarism, that never did, and never will, find favor in our faith; for our belief is, *that that which is worthy of being done, is worthy of being well done.*

Preparation of the ground.—The land should be deeply, thoroughly, and truthfully ploughed, harrowed, and rolled, until brought to a tilth as fine as the soil is susceptible of. Equally important is it, too, that the soil itself shall be in a condition to furnish the necessary food to sustain the growth of the plants; to nurture, and mature their fruit; for as we have often had occasion to remark—*something cannot be made out of nothing.* As well might a man expect a tailor to make a suit of clothes without the necessary materials, as to expect the soil to yield a good crop, unless there be in it the necessary food to sustain the plants that may be attempted to be grown in it.

"*The Oats-crop is a very exhausting one*"—is a saying, that has been handed down from father to son, until it has been received as a truism, and universally believed; but, for the life of us, we never could give it our credence to any but a limited extent. Why should it be more "*exhausting*" than any other crop? Does it abstract more from the soil? We have yet to see the proof that such is the case. If analysis does not reject such conclusion, it shows, that it is but partially so. But then says some believer in this saying,—"*Other crops do not grow kindly after oats!*" This may be the case; for, generally speaking, oats are grown on the poorest field on almost every farm, and nine times out of ten, without the least particle of manure being appropriated to the crop.

Although oat-fields are mostly too poor to grow anything—yet, if the season be a good one, distinguished by frequent showers, accompanied by lightning, we frequently find tolerably fair crops as the result. This does not show that the plant is inordinately exacting in its appetite; but that, among other things, it requires moisture, and the existence of a condition of the atmosphere, calculated to contribute to its sustenance—calculated to provide, in *part*, and prepare its food.

There is no plant more susceptible to the influence of drought than is the oat, and hence the land in which it may be sown should always be ploughed deep, for the two-fold reason, that moisture and fertilizing elements may be economised from the air, as but little nutritive matters are to be found in those soils in which oats are mostly grown, as, by previous improvident cropping, their virtues have been well nigh exhausted, and especially is such the case, where *shallow* ploughing for a long series of years have been pursued. To ensure a fair crop on fields of such description, deep ploughing must be resorted to; for the deeper the bed, the greater will be the degree of moisture that is kept up, particularly so in seasons of drought, when its chief source of supply is from the transpiration of the earth—a process that is always going on, and its volume regulated, of course, by the *depth* and quality of the surface soil, as from the general indurated condition of the subsoil, but little is derived from that source.

Let us return to the subject of the exhausting nature of the oat crop. To exemplify our views, we will give a *table*, showing, as far as we can, what are the constituent elements of *Wheat*, and of *Oats*, in order that, by comparison, our readers may see for themselves in what substances they differ.

"According to the analysis of *Sprengel*, 1000 lbs. of Wheat leave 11.77 lbs., and of wheat *straw* 35.18 lbs. of *ash*, (inorganic matter,) consisting of—

	Grain of Wheat.	Straw of Wheat.
Potash	2.25	0.20
Soda	2.40	0.29
Lime	0 96	2.40
Magnesia	0.90	0.32
Alumina, with a trace of iron	0.26	0.90
Silica	4.00	28.70
Sulphuric acid	0.50	0.37
Phosphoric acid	0.40	1.70
Chlorine	0.10	0.30
	11.77 lbs.	35.18 lbs.

In 1000 lbs. of the *grain* of the *oat*, are contained about 26 lbs., and of the dry *straw*, about 57¼ lbs. of inorganic matter, consisting of—

	Grain of Oats.	Straw of Oats.
Potash	1.50	8.70
Soda	1.32	0.02
Lime	0 86	1.52
Magnesia	0.67	0.22
Alumina	0.14	0 06
Oxide of iron	0.40	0.02
Oxide of Manganese	0.00	0.02
Silica	19.76	45.88
Sulphuric acid	0.35	0.79
Phosphoric acid	0.70	0.12
Chlorine	0.10	0.05
	25.80 lbs.	57.40 lbs.

We will now form a *comparative table*, to show in what the differences, in the abstraction of inorganic matters from the soil, of the Wheat, and Oat crop, consists.

A *Table* showing the quantities and kind of inorganic matters abstracted from the soil, in the formation of 1000 lbs. of the *grain of Wheat*, and 1000 lbs of *Wheat Straw;* and what quantities and kinds are so abstracted from the soil, in the formation of 1000 lbs. of the grain and 1000 lbs. of the *straw of oats.*

	Inorganic matters in 1000 lbs. of the *grain*, and 1000 lbs. of the *straw* of *Wheat.*	Inorganic matters in 1000 lbs. of the *grain*, and 1000 lbs. of the *straw* of *Oats.*
Potash	2.45	10.20
Soda	2.69	1.34
Lime	3.36	2.38
Magnesia	1.22	.89
Alumina with a trace of iron	1.16	.62
Silica	32.70	65.64
Sulphuric acid	.87	1.14
Phosphoric acid	2.10	.82
Chlorine	.40	.15
Oxide of Manganese		.02
	46.95 lbs.	83.20 lbs.

The above *Tables* are valuable. The two former show us, what inorganic substances enter into the composition of the grain and straw of wheat, and of oats, and what quantities are abstracted from the soil, in the growth of the quantities named, of each,—while the last table shows, at a glance, the quantities abstracted, relatively, of the different substances which go to make up the *inorganic* parts of each.

If we examine the last table, we will find, that it requires 7.75 lbs. more potash to make 1000 lbs. of the grain of oats, and 1000 lbs. of straw, than it does to make the same quantities of the grain, and straw, of wheat; but the reason of this is obvious enough, if we look at the immense difference in the quantity of *silica* found in the two grains, and in their straws. While there is but 32.70 lbs. of silica contained in 1000 lbs. of the grain of wheat, and 1000 lbs. of its straw, there are 65.64 lbs. contained in the same quantities of grain and straw of the oat, an excess in favor of the latter, of 32.94 lbs.—an excess of more than 100 per cent. Silica, or sand, is to be found in every soil, but before it can be availed of by the plant, as a part of its food, it has to be decomposed, and become a silicate, viz. the silicate of potash—to effect this chemical transformation, the presence of potash is necessary in the soil; for, to it, is this preparation of the silica, as the food of plants, mainly indebted; and hence it is, that whatever other manures we may apply, we should never omit ashes or potash, or such other substances, as by decomposition yields the latter.

Of *Soda* there is 1.35 lb. more in wheat, in the quantities of grain and straw named, than there is in oats; but this can very readily be supplied by a bushel or two of common salt—and it will be the better, if it be the refuse salt of packers of meat or fish, as such salt always contains more or less animal matter, and may be had for ten or twenty cents a bushel.

Of *Lime*, the difference is in favor of wheat, the quantities of grain and straw abstracted from the soil being 3.36 lbs., whereas the oat takes but 2.38 lbs., being 28-100 parts of a pound more than is taken up by the oat—a matter of no moment, however, when there is lime in the soil.

Of *Alumina* and *iron*, the quantities required by the grain and straw of the wheat, is 54-100th parts of a pound more than is required by the oats; but as there are scarcely any soils without both these substances, and the quantity is so small, we look upon this difference as of no moment whatever; and then, we are not so sure, that the alumina detected is not accidental.

Wheat requires ⅓ of a lb. more *Magnesia* than does the Oat, in the quantities of grain and straw named, but as the quantity is so trifling, it is of no importance.

To make the quantities of the grain and wheat of straw named, takes 1.14 lbs. of Sulphuric acid—of oats only 0.87 lb., being 0.27 lb. more than is required by oats, a matter of trifling consideration, as it can be supplied by a very few pounds of plaster.

Of *Phosphoric acid*, the quantities of grain and straw of wheat named, require 2.10 lbs.—Oats but 0.82 lb.—being 1.28 lb. more for the wheat than for the oats. But this is a matter of little consideration, as the quantity required for either, is very small, and can readily be supplied by a few bushels of bone-dust or ashes.

Of *Chlorine* there is ¼ lb. more in the wheat, than in the oats—but as this substance, like Soda, will be supplied by the Salt, it is not worth dwelling upon.

We see then, with the exceptions of *Potash* and *Silica*, that wheat abstracts more inorganic matter, than does the oat from the soil, and as *potash* can be supplied, and *silica* prepared, for the latter, by a top-dressing of ten bushels of leached ashes, or 5 bushels of unleached ashes, per acre, we do not see why the oat should be considered in the light of a great exhauster, so far as the inorganic substances of which it is composed are concerned. It is, to be sure, a greedy devourer of potash, that being particularly necessary to form the outer coating of the straw, give it elasticity, and enable it to stand erect and support its grain; but that need not involve much expenditure of money, if moderate applications of ashes be made at short intervals. And, indeed, by such applications of ashes, every inorganic substance needed by plants, would be supplied.—This will appear the more plain from the following extract from "Dana's Muck Manual," p. 144:—

"A bushel of good ashes [hard-wood] contains about 5½ bushels of real *potash*. In leaching ashes, generally about one peck of lime is added to each bushel of ashes, and as it loses no bulk during the operation, a cord [103 bushels] of leached ashes contains about the following proportions, allowing the usual proportion to be leached out, or 4½ lbs. per bushel:—

Phosphoric Acid	117 lbs.
Silex	146 "
Oxide of iron	17 "
Oxide of Manganese	51 "
Magnesia	119 "
Carbonate of Lime, including that added in leaching	3072 "
Potash, combined with silica	50" "

These quantities are ample for a supply of years—and we firmly believe, that if 10 bushels of ashes (unleached) were applied as a top-dressing at the commencement of each rotation, the soil would not suffer for the want of inorganic food for the crops, as in that quantity of ashes there would be sufficient *oxide of iron, oxide of manganese, lime, magnesia, potash, soda, sulphuric acid, phosphoric acid,* and *carbonic acid,* to supply the wants of the plants. But all such top-dressings should be preceded by applications of *nutritive manures,* of some kind, applied with a gen-

erous hand, and the soil further aided, by clover and the grasses forming a part of the system of culture; for we do hold it to be true—that no land, except through very heavy applications of putrescent manures, without clover and grass, can be preserved in a state of improvement.

Of the relative proportions of the *organic* parts of *Wheat*, and *Oats*, the following analysis by Sprengel will show the results:—

	Wheat.	Oats.
Carbon	455	507
Hydrogen	57	64
Oxygen	431	367
Nitrogen	34	22
Ash	23	40
	1000	1000

Wheat contains from 8 to 35 per cent. of Gluten.
Oats " " 2 to 5 " "
Wheat contains of *Albumen* from ½ to 1½ per cent.
Oats " " " 1-5 to ½ "

From the above, it is evident, that so far as what are termed the *nutritive* portions of wheat, and of oats, are interested, the latter has less in it than the former, and, in that respect is less exhausting than it. We believe that, except so far as *potash* is concerned, it takes less from the soil than most other crops, and is only a *special* exhauster—an exhauster of a substance, which, though highly essential, is by no means an expensive one, where proper means are taken to re-supply it to the earth, at short periods, as there is actually as much potash in a bushel of hard-wood ashes—if it were not for the wastage—as would serve for an annual supply of that mineral to an acre of oats.

Preparation of the ground.—We have before shown, why the ground should be ploughed deep, and we will say, that if the land be sound—*not wet*—it should be both ploughed and subsoiled. If ploughed only, the furrow should be 8 inches deep. If subsoiled, also, 6 inches surface ploughing will answer, with the same depth of subsoiling. The practice of merely ploughing 3 or 4 inches in depth, is killing to the land, and injurious to the pecuniary interest of the farmer—for, as a consequence, he exhausts the soil, makes a short crop, and decreases his profits.

After ploughing, or ploughing and subsoiling, the land should be thoroughly harrowed, and rolled, the seed then sown and harrowed, or cultivated in, and the job finished by rolling, and sowing thereon a bushel of salt and a bushel of plaster per acre.

With regard to the manures, we were so full last month upon this subject, as not to need repetition. But to those who have no other resources, we will say, that by mixing their barn-yard manure, with woods-mould, leaves, and pine shatters, in the proportion of one of the former, to three of the latter, layer and layer about, and by mixing 2 bushels of salt with every 20 loads of the mass, will have a manure that will ensure them a good crop of oats, provided such compost is permitted to lie in bulk two or three weeks, before being used, to excite decomposition in the more dormant materials. And we will here make the remark, that a poor soil, unaided by nutritive manures, and ashes, cannot grow a large crop of oats.

Quantity of seed per acre.—On any soil fit to grow a crop of oats, we would not sow less than 2 bushels of seed per acre. If the land was naturally very rich, or had been highly manured, we would sow 3 or 4 bushels to the acre.

Draining Marshes.—If you have a marsh on your farm, and there is inclination sufficient to carry off the water, have it ditched, and drained, compost the dirt excavated, with your barn-yard manure. Next August, if your draining shall have relieved the marsh of its water, sow it in timothy, or red-top, according to its condition, or both combined, and lay the ground work of a good meadow—of a resource for hay and pasture. In securing these things, you will also promote the health of your farm, protect your family from autumnal diseases, and set an example to your neighbors, whose benefits will be so manifest, as to make them follow suit; and thus, through your public spirit and enterprise, you may be the means of changing the appearance of your whole district—improving alike its sanitory, and pecuniary resources, and, as a consequence, the value of landed property.

Permanent Pasture.—If you have an old field that you have turned out to *rest*, and you desire to convert it into a permanent pasture for your stock, you may do so by pursuing the following plan: plough it up 6 inches deep, harrow and roll it, then sow at the rate of 3 bushels of peas, broadcast, per acre, harrow them in, and roll. When they come into bloom, plough them under, roll, and harrow your land: leave it in this state about a week, then sow 1 bushel of buckwheat, harrow it in, and roll the ground: when the buckwheat comes into bloom, plough it in, roll the ground, spread thereon 50 bushels of lime, or the same quantity of ashes, or twice that quantity of marl, harrow it in, then roll the ground, and sow on each acre of it, 1 peck of *timothy* seed, 1 bushel of *Orchard grass*, ½ bushel of *Kentucky blue-grass*, and 1 peck of *red-top;* top-dress with a mixture of 1 bushel of salt and 1 bushel of plaster, per acre, harrow lightly, and finish by rolling. Next spring as soon as the ground is sound, sow at the rate of 10 lbs. of clover seed per acre, roll it in, and you may secure yourself a pasture for twelve or fifteen years—one that will give you, in good seasons, from one and a half to two tons of hay per acre, and furnish pasture for your stock the residue of the season; provided you top-dress it with compost formed of well rotted manure and ashes, in the fall of every *second* year, and dress it with equal parts of plaster and salt each spring.

Clover Seed.—If you did not sow clover seed last month, do so this, towards the latter end of the month, but not until the frost is entirely out, and the earth settled; then sow 12 lbs. of clover seed per acre, harrow it lightly in with a light harrow, and roll the field. If you fear the harrowing process, do not fail to roll the seed in.

Early Turnips.—As soon as, from the absence of frost, the ground can be put in good order, select a spot adapted to turnips, manure it well with well rotted barn-yard and stable manure, plough that in 6 or 8 inches deep, harrow, and put on a top-dressing, composed of 7 parts well rotted manure and 1 part ashes, harrow that in, sow your turnip seed, harrow them lightly in, and give the ground a dusting of freshly slaked lime. When the plants come up, sprinkle fish oil over them, 3 or 4 successive mornings, early. When they begin to bottle, thin them out, so as to stand 8 or 10 inches apart, stir the soil with the hoe, and dust over them equal quantities of salt and plaster, at about the rate of a bushel an acre of each. Keep the ground stirred, and your patch clean of weeds, and you cannot fail to have a good and early crop. The *Early Flat*

Dutch is the best kind to sow at this season. If you are near a market your early turnips will bring a good price.

Early Potatoes.—As early potatoes always command a good price, it is the interest of those who are convenient to market, to see that their's are got in at the earliest period, after the frost is out of the ground, that the soil can be advantageously worked and put in first rate order.

Of the soil.—If we wished to make a very early crop, we would select a sandy loam on which there were a clover-ley or grass-sward, with a southern exposure. This we would plough to the depth of 8 or 10 inches, lay the furrows flat, roll, then harrow, and roll again, when the soil would be ready to be laid off into rows for planting, which should be north and north.

For minute instructions, as to the processes of our method of cultivation, we refer to our Month's Work of last March, page 287, and will only add, that the rows, as soon as the potatoes come up, should receive a dressing of a mixture of equal parts of ashes, plaster, and salt,—a bushel of each will be sufficient for an acre.

Artichokes.—The culture of this root has been too much neglected, and we hope, as the Potato has become a very uncertain crop, that those agriculturists who are notable enough to grow roots for their stock, will turn their attention seriously to this root, as a substitute for the potato; for we are very certain that, for such purposes, the root is at least equal to it,—whereas, if we take into account the stalks and blades, an acre will produce double or treble the quantity of provender that would one planted in potatoes.

If the stalks be cut about the beginning of October, and dried in stooks, as corn-stalks are; and be afterwards stacked, or housed, and cut into inch pieces, as fed out to the cattle, they will make quite a grateful food—while their value would be much increased, if they were steamed, or otherwise cooked, before being fed out to the stock. We saw a very cheap fixture for such purposes on the farm of a neighbor of ours, for cooking cornstalks for his dairy cows, that would answer equally well for preparing the stalks and fodder of the artichoke. He had in one corner of his cow stable, partitioned off from the part occupied by his cows, a fire-place, in which he had fixed up a large pot, in which he heated water; close by he had a large oblong wooden box, made water tight. In this box his corn-stalks, when cut into small pieces, were put, and pressed down; on these he poured boiling water from his pot, and when sufficient water was put in, he placed on a top, which he used to keep in the steam, and on the top of that, a fifty-six pounds weight. By the time the stalks were cool enough to be mixed with bran or cob-meal, the stalks were cooked. In this simple and inexpensive way, he was enabled to convert the stalks of a forty acre field into good food for his milch cows, and to sustain them in good health throughout the winter; and we are very sure, from the appearance of his cattle, that they could not have been more advantageously wintered upon hay, as they came out in the spring in fine health and condition. And we are as sure, that, thus managed, the stalks of the Artichoke would be found equally good as cattle food.

Having spoken of the artichoke as a substitute for the potato, for cattle food, we will give a comparative table of the organic parts of both roots, by which the reader will be able to determine for himself the nutritive properties of each. We copy from the Analysis made by professor *Salisbury* for the New York State Agricultural Society. Dr. Salisbury analyzed both the *white* and *red* variety of the artichoke, but as we believe the latter to be the best adapted to feeding purposes, we shall omit his analysis of the former, in forming our comparative table.

Comparative *table* showing the nutritive properties of the Artichoke and the Potato:

	100 grains Artichoke fresh Tubers.	100 grains Potato fresh Tubers.
Water	68.330	74.712
Fibre	3.676	6.839
Sugar and extract	7.688	2.367
Dextrine	5.436	0.923
Casein	4 400	2.054
Albumen	4.086	0.185
Starch	5.884	12.399
Resin	.184	trace
Glutinous matter	.122	0.009
Fat	.018	0.008
	99.824	99.496

Upon the above, professor *Salisbury* remarks:—

"The artichoke contains much less starch than the potato, but is *richer* in sugar, dextrine, albumen and casein. Its power for fattening, perhaps, would not equal that of the potato, but in muscle, nerve, &c. forming products or nitrogen bodies, its composition would place it quite equal to that of the potato.—The analysis show it to be even richer. We hope, as the plant is one of easy culture, that its utility as food for stock will be practically tested."

This table is made of equal quantities of these two tubers, and, therefore, though so far as an equality of *weight* may be concerned, the potato may contain more of the *fat*-forming principle, than does the artichoke, yet when we come to consider the fact, that while an acre in potatoes, under very favorable circumstances, will not yield more than from 100 to 150 bushels—we are speaking of its *present* productive habits—an acre in artichokes will yield 500 or 600 bushels, we must concede, that the latter will give a much greater acreable product, even of fat-forming principles, than would two acres planted in potatoes, while the product of flesh, muscle, and nerve forming principles, in an acre of artichokes, would exceed the product of such matters on three acres of potatoes. This is a consideration, in an economic point of view, of the most vital importance, and should commend the culture of this root to every farmer and planter, with whom economy is esteemed as a virtue—and it should be so esteemed by all,—and especially as it takes no more labor—no more manure—to grow an acre of artichokes than it does to grow one of potatoes.

There is another consideration that should have its influence; lands once planted in Artichokes, will produce crops for many successive years, without re-planting, provided it be dressed each spring with manure, after the plants show themselves, and subsequently ploughed, and cultivated.

Manure.—In speaking of the proper manure for the Artichoke, professor *Salisbury* gives the following *recipe*, for a compost for an acre:

"*Compost*,—Fifty pounds of Gypsum or plaster, fifty pounds of common salt, three hundred pounds of ashes, one ton of hog manure, or two tons of

cow, sheep, or horse manure, five to ten tons of peat."

The above compost would alike provide for the inorganic and organic wants of the artichoke; but as there are many parts of our country, where peat is not to be had, we will give a recipe for a compost that may be availed of everywhere. The quantities are intended for the manure of an acre:

15 loads of wood's-mould and leaves, (or pine shatters, if the woodland be pine,) marsh mud, river mud, ditch scrapings, &c., 5 bushels of ashes, 2 bushels of common salt, and 1 bushel of plaster.—The whole to be composted, layer and layer about, and remain in bulk a few weeks, then shoveled over; when it will be fit for use.

Preparation of the ground.—Spread your manure evenly over the ground; plough it in deepiy with a strong team, harrow, and roll.

Soil adapted to its culture.—Deep sandy-loam. If a grass-sward, or clover-ley, so much the better.

Time of planting.—As soon as the frost is out of the ground, in spring, as the earth has become settled and can be advantageously worked.

Cutting the sets.—Cut the Artichoke as you would potatoes, so as to leave one or two eyes to each set, sprinkle plaster, or ashes, over them, and place the sets in a cool, dry place for a few days before planting them.

Quantity of seed per acre.—From 12 to 15 bushels of artichokes will plant an acre.

Laying off the ground.—Run your furrows *north* and *south*, 3 feet apart, 4 inches deep, then list across these furrows 2 feet asunder, the same depth.

Planting.—Drop a set at every intersecting list, throw on it about a quart or pint of good rich mould, or of the compost, and cover as you would potatoes.

After Culture.—When the plants come up give them a dusting with about a gill of ashes to each hill, or the same quantity of a mixture composed of equal parts of ashes, plaster, and salt, and otherwise treat them as you would a crop of corn; the great object being to keep the earth open and clean.

Cutting Stalks for provender.—About the first of October, you may cut off the stalks, stook, and dry them, as corn stalks are managed.

Gathering and preserving the Roots.—Gather them as potatoes are. They may be kept in a dry cellar, or be buried in any dry soil, as turnips or potatoes are managed. If you are pressed for time, and design the tubers for spring use, for succulent food for your milch cows and other stock, if the soil be a dry sandy loam, they may be left in the ground all winter, by turning a furrow on either side of the rows with the plough: Or if you have a stock of hogs that you wish to push forward, before you pen them for fattening, you may, after you have cut, cured, and removed the stalks and fodder, turn your hogs into your Artichoke lot; once there they will do their own digging and eating, and as a consequence grow saucy and fat. For the first few days, they should only be permitted to remain but an hour or two at a time; after that they may be left there altogether, but should be provided with a trough containing ashes, salt, and charcoal; the *artichoke* will afford them water enough for drinking purposes.

When your hogs may have dug and consumed your crop of artichokes, remove them, give the ground a harrowing, and then roll it. Next spring, so soon as vegetation starts, you will find that the hogs left seed enough behind to ensure a crop: then, when the plants are fairly up, manure and cultivate, as before advised, and you cannot fail, each succeeding year, for many years, to have a good crop of artichokes; for once in the ground, they are tenacious of possession. If you should dig and store the tubers; harrow, roll, and treat, as above recommended, and you will find that there is enough left to stock the grounnd. Hence, an Artichoke lot should be kept solely for that purpose; but the manuring, and culture, must be faithfully adhered to each succeeding year.

If you desire a portion of the tubers for your milch cows and other cattle, dig a part and store them, and then turn your hogs in upon the un-dug part.

Fences.—Go, *yourself*, around your fences, throughout their entire lines, carefully examine every panel, and wherever one needs renewing or repairing, have such panels as require it, renewed, and those repairs attended to immediately. There is nothing more economic than having one's fencing strong and sound when the cattle are first turned out in the spring, as weak and defective panels, breed a breaching disposition in them that is not often forgotten, or given up. And as prevention is better than a cure, *see* that your fences are cattle-proof.

Bars and Gates.—We have, time after time, recommended our readers to substitute *gates* for bars on every field on their place, and we repeat it again, because, from experience, we are firmly convinced that the former is more convenient, safer, and cheaper.

Fence Sides and Corners.—If yours be lined with bushes, brambles, and briars, have all such nuisances grubbed up, burn them and use the ashes for manure; for a bushel or two of ashes will supply the inorganic food for many bushels of wheat, corn, oats, rye or barley. These pests removed, then plough up six or eight feet along the line of your fence, and mix every two loads of it with your barn-yard and stable manure, together with two bushels of salt or one of plaster and 2 bushels of ashes, to every 20 loads of the compost, layer, and layer about, and you will add two-thirds more to the quantity of your manure, without lessening its active properties,—so that by following our advice you will be able to do justice to your crops, they be increased in quantity, as well as money value, and the result will be so flattering to your interests, as that, hereafter, you will learn the importance of attending to what, upon the surface, may appear as small matters, and come to the conviction that has long since impressed itself upon our mind, that prosperity can only be the lot of that agriculturist, who husbands and converts to active use, every thing on his farm that can, by proper admixture and management, be transformed into food for his crops.

Accumulation of Manure.—As farmers in the interior have not the same facilities of procuring *Guano*, and other highly concentrated animal manures, as those who live near the mediums of cheap transportation, and as there may be others, who may not be able to buy them, it shall be our business to point out such resources on their lands, which, if availed of, as may render such expenditures unnecessary.

Those who have woodlands attached to their farms, whether they be hard-wood, or pine lands, may, by exertion, increase their quantity of manure, at a very trifling expense beyond the labor of collecting and composting, for, if with every two loads of wood's-mould and leaves, they mix one of stable or barn-yard manure, and add 1 bushel of

ashes, 1 bushel of plaster, and 1 or 2 bushels of salt, to every 20 loads; mix the whole together, layer and layer about, leave it in bulk a few weeks, they will have a compost equally fertilizing, and more lasting, than would be the barn-yard manure by itself. We say this not because it is justified by theory, but, because, from experience we have tested the truth of what we say. Marsh mud, river mud, road-scrapings, ditch scrapings, and all kindred substances, treated in the same way, will prove equally good. But, be the substance what it may, that may be thus mixed, it should be left in bulk long enough to excite the incipient stage of decomposition, as that is essential to bring into activity the dormant powers of bodies which have been long excluded from atmospheric influences. Give the substances we have named the advantage of the treatment we recommend, and the property of dispensing food to growing plants will be restored, as the recuperative principle, though it may, by the force of circumstances, slumber for years, can, by proper appliances, be restored to vigorous action, as it is consonant with the laws of nature, that all things which ever had life, is competent to reproduce it. This has been happily verified in the management of *peat*, a substance, which, though it may have lain buried in the earth for centuries, by admixture with a few bushels of ashes, 2 per cent. of potash, or ammonia, or one-third its own volume of horse, or cow dung, or any other animal manure, can be converted into an active fertilizer. So would a dead horse or cow if cut up and composted with 20 loads of such materials in five or six weeks convert the whole into a body of the most fertilizing manure, every pound of which would be equally as good as stable manure.

In all composts of the kind spoken of, the farmer should cause the soap-suds, chamber-ley, and other slops, made about his premises to be poured on his compost heaps; nor should he forget to give the same direction to the sweepings about every part of his establishment.

Root Crops.—Those who may design growing roots to feed to their stock, should now be looking about them to get the manure ready; for though it is too soon to sow Beets, Carrots, Parsnips, Mangel Wurtzel, and Ruta-baga, it is not too soon to be providing food for them.

Corn.—In some parts of our country, where corn is extensively grown, it will be time to plant corn before our next visit, we would, therefore, say to our readers, strive to get a good stock of manure for this crop, as it is a greedy feeder, and cannot yield largely unless it be well fed.

Hauling out Manure.—Have a care to haul out your manure timely; but before you haul it out, mix with every twenty loads of it, if they have not been previously applied in composting, 2 bushels of salt and 1 of plaster.

Liming and Marling.—If your lands need liming or marling, apply it on your corn ground. After you have ploughed and harrowed, spread your lime, or marl, and then harrow it in.

Clay on light sands.—If your land is a light sand, if you would compost 10 loads of clay with 10 loads of manure, you would find that this compost would do you more good, on such land, than would twenty loads of manure applied alone.

Orchards.—During this month, if there are any dead limbs on your trees, they should be carefully cut off into the sound wood, the wounds should be made smooth and receive a dressing of a mixture of equal parts of rosin, beeswax, and tar, melted over a slow fire; after two coats are put on, dust the surface with sand.

If the bodies of the trees are mossy, or the bark rough, scrape them, and apply a dressing composed of 1 gallon of soft soap, 1 lb. of flour of sulphur and 1 quart of salt. And if your orchard has not been recently manured, give it a dressing of manure, to be ploughed in with care so as not to lacerate the roots of the trees. A good compost for this purpose would be a mixture of wood's-mould, marsh mud, barn-yard or stable manure, ashes and bone-dust.

But, if you have no orchard on your farm, plant out one this spring or next fall.

Milch Cows and other Cattle.—This is a hard month upon Cattle, therefore, see to it that yours are well cared for, as we advised last month.

Working Animals.—These should receive plenty of food and be well cared for during this month.

Sheep—Breeding Sows—Store Hogs.—Let these receive renewed attention.

Poultry.—Let these receive the care we recommended last month.

Out houses—Cellars.—If these have not been recently cleansed and whitewashed, have them attended to without farther delay.

Shade trees—Shrubbery.—If your dwelling is without these sources of comfort and enjoyment, supply the deficiency this spring.

Tobacco Beds—For their management refer to the admirable essays of Messrs. *Bowie*, *Jones*, *Milburn*, and *Blackistone*, to be found in our two last volumes. In those Essays everything that need be known can be found, and we risk nothing in saying, that the essays in question never have been equalled on the subject of the Tobacco culture, and in all probability never will be excelled.

Implements and Tools.—Examine, *yourself*, every thing of this kind; if any need repair, have the repairs made without delay. At this season particularly, every implement and tool on the farm should be in tip-top order, ready for use any moment when needed.

Winter-killed Grain.—If your grain is winter-killed, or spewed up, pass a light harrow over it, and follow that with a roller. These operations should be performed as soon as the frost is out of the ground, and the soil sufficiently dry to admit the team without danger of poaching.

Meadows.—Hide-bound meadows should be harrowed, dressed with 5 bushels of ashes, 2 bushels of bone-dust and 2 bushels of salt per acre, which should be rolled in.

Things to be Saved.—All the bones, rags, offals of every description, poultry-dung, urine, soap-suds, old leather, hair, feathers, dead animals, soot, &c. made on your premises, should be saved, and composted with earth of some kind. There is enough made on even a small farm in a year to infuse the principle of fertility into fifty loads of common earth. Take our word for the truth of what we state; act upon our suggestion, and you will be surprised at the end of the season at the immense body of fine manure that you have accumulated.

☞ The Angola Peas and Okra seeds from Louisiana, mentioned in our last, have not yet come to hand—we have received applications from a number of persons for them, to whom they will be forwarded as soon as received.

WORK IN THE GARDEN.

MARCH.

Those who desire to lay the ground work of a good garden, must avail themselves of the earliest occasion during this month to commence their operations. All delays, beyond the period when the frost is out of the ground, cannot fail to prove of great disadvantage throughout the entire season, so far as the growing of *early vegetables* are concerned —and it should be the object of every owner of a garden, to devote a portion of it to such purposes; for there is nothing more conducive to the health and comfort of one's family, than full supplies of vegetables, at all seasons of the year, to say nothing upon the score of economy, in the saving of animal food—to say nothing about the moral influence which is exerted around the homestead, by the existence of a well appointed, and well cultivated garden—to say nothing about the elevated position which it gives to the possessor, in the regard and respect of his neighbors. And as these considerations are of moment, and should operate so as to excite a laudable ambition, we shall indulge the hope, that each of our readers will feel himself called upon, to exert his best energies, to make *his* garden the best of his neighborhood. If he should do so, we promise him this:—he will find that the ground appropriated to it, as well as the labor and means expended upon it, will prove to be more profitable than any expenditures bestowed upon any other part of his estate, relatively considered.

With these brief introductory remarks, with your permission, we will endeavor to point out to you what should claim your earliest attention.

Sowing Seeds of different kinds.—So soon as the frost shall be out of the ground, and the soil in a condition to be well worked, select a warm border, facing the South, protected from the north and west winds, manure it freely with stable manure, dig it up a spade deep, taking narrow slices, and covering the manure carefully, rake until the soil be thoroughly pulverized, and made perfectly fine. Then divide it into as many different compartments as you have different kinds of seed to sow. Your bed being thus prepared and subdivided, sow the following kinds of seed therein,—*Early Cabbage*, of different sorts, *Cauliflower*, *Broccoli*, *Tomatoes*, *Egg-plants*, and *Lettuce*; rake the seeds lightly in, and *gently* press down the earth on them with the back of a spade, or shovel. By thus compressing the earth on the seed, the process of germination will be greatly promoted.

If a dry spell of weather should occur after the plants are up, and they appear to suffer for the want of moisture, put half a bushel of horse-dung into a tight barrel, fill the barrel up with water, taking care to place the barrel in the sun. After standing therein a day, the decoction will be fit to use.—Water the plants with it. At this season, such operations should be performed in the forenoon. The quantity of horse-dung named, will allow the barrel being filled up three or four times.

If after your plants are up they should be attacked with insects, and, as a consequence, put on a diseased appearance, put 1 gallon of *soot*, and 4 oz. of *flour of sulphur* in a bag, place the bag in a tight barrel, and pour thereon 5 gallons of boiling water, let it stand until the water cools, then fill up the barrel with water. With this decoction give your plants three or four waterings in the forenoon of as many successive days, and you will effect two desirable objects—the vermin on your plants will be destroyed, and the plants themselves restored to health, and will, very soon, begin to grow vigorously.

The barrel, if need be, may be filled up with water three or four times. In the above recommendation, we speak from our own personal experience of its benefits.

A very good substitute for the horse-dung tea, may be found in dissolving 3 lbs. of Guano in 30 gallons of water.

Cultivation of Asparagus.—It gives us pleasure to redeem our promise to our "*Lady Subscriber at Petersburgh, Va.*," of giving an article upon this subject when the proper period of action should have arrived.

Time of Sowing Seed to grow plants.—The proper time for sowing the seed of this vegetable, is as early in the spring as the frost is out of the ground, and the soil may be in a condition to be well worked, and put in a state of perfect pulverization.

Kind of Soil for Seed-bed.—A deep sandy loam is the soil best adapted to this purpose, though any soil in which sand predominates will answer. Asparagus is emphatically a plant that delights in sandy soils.

Preparation of the bed.—Broadcast over the bed, or border, selected, a liberal dressing of stable manure, barn-yard manure, or any rich nutritive compost; dig up the ground full a spade in depth, rake until the soil is perfectly fine; then draw drills 8 or 10 inches asunder, *half* an inch deep, and *thinly* sow the seed therein, cover with the rake, and gently pat down the drills with the back of a spade, or shovel. This done, strew a mixture of salt and ashes over the bed, so as to whiten the surface.

Treatment of the Bed and plants.—Should the weather prove dry before the plants come up, the bed must be watered every few days. After the plants are up, care must be observed, in times of drought, not to let them suffer for the want of water, as it is important that their growth should be continuous and uninterrupted. A decoction formed of 2 quarts of soot, dissolved in ten gallons of water, occasionally, will be found an excellent substitute for pure water, in dry seasons. The *plants* must be kept clean of weeds, and the earth stirred throughout the season.

Quantity of Seed.—One or two ounces of Asparagus seed, will be sufficient to grow plants enough to supply the wants of a large family. Should the design of the grower be, to raise Asparagus for market, the quantity of seed will, of course, have to be increased, so as to meet the object in view.

Age of Plants for setting out.—Upon this head there is a diversity of opinions among good gardeners; some contending that the plants should be *two* years old before transplantation into their permanent bed, while others prefer to set them out when *one* year old. We prefer the latter age, and believe, that, if proper pains be taken to keep the plants clean, and well watered, in the seed bed, that at least a year may be gained in the time of cutting the asparagus, by setting out the plants when one year old. Those who do not wish to wait for the growing of plants, can obtain them of most nurserymen.

Having disposed of the question of raising the plants, we shall now proceed to the formation of the permanent asparagus bed.

Formation of a new Bed.—When the plants are a year old, as we have before stated, they will be fit

to be transplanted into the bed they are permanently to stand in. In early spring, so soon as the frost is out of the ground, select your bed in an open, well exposed part of your garden. The *soil should be a deep, dry, sandy loam.* Spade it to the full depth of your spade, casting the surface soil on one side of you, so as to be convenient to be replaced, when the subsoil shall have been spaded up. After the surface soil has been removed to the full depth of the spade, put on two or three inches of well rotted stable manure, dig that in to the full depth of the spade; this done, rake the surface, and apply two or three inches in depth, more, of well rotted manure, replace the surface soil, and rake the bed until perfectly fine; then broadcast over the bed about an inch, in depth, of well rotted manure, as before, rake that in thoroughly, so as to incorporate it well with the surface soil.

Laying off the bed and setting the plants out.—Your ground being *manured, trench-dug*, and *thoroughly pulverized*, by raking, divide it into beds 4⅓ feet wide, leaving alleys 2 feet wide between each bed. Then stretch a line 8 inches from the edge, cut a drill close to the line, 6 inches deep, the side next the line to be upright. Your drill being opened, set your plants in as *upright* as possible, 10 or 12 inches asunder in the row, the crowns to be 2 or 3 inches below the surface of the ground. In setting the plants in the drill, spread the roots out as evenly as practicable before covering them over. As you set each plant in position, draw a little earth with your hand, over the roots, to keep the plant steady until you are ready to cover over. Your row of plants being thus fixed in the drill, draw the earth with a rake over it, so as to cover the plants. Then drive down a stake at each corner of the drill, so as to designate the line of plants, and thus serve as a landmark, or index, in working the bed from year to year afterwards, in order that injury to the crowns of the plants may be avoided.

Your first line of plants being in and covered, dig a *second, third* and *fourth* drill, as before, and set out your plants as advised above, taking care to drive a stake at each end of every row, as you proceed.—The beds being 4 ft. 4 inches wide, and the first row being 8 inches from the edge, will give 4 rows of asparagus to each bed, at 12 inches apart. This arrangement, with the 2 ft. alleys, will allow ample room to work the asparagus, and to cut it for use, without injury from trampling.

The plants being all set out and covered, gently rake the bed, and sow thereon as much *salt* and *ashes*, mixed in equal quantities, as will thoroughly whiten the surface of the bed.

After Culture.—Should the weather prove dry after the plants are set in the drills, the beds must be watered at least every second day, until the plants show themselves above ground, as, without moisture, they cannot take root, so that only a few successive days of drought, if neglected, might prove fatal to them. From the very onset, the beds must be kept clean from weeds and grass, and the earth stirred, so as to derive advantage from atmospheric influences. If the plants be kept clean, the earth open, and attention be paid to *free waterings, in dry seasons*, the Asparagus may be advanced at least one year in its *full bearing properties.* Generally, it takes three years to develope the productive powers of this vegetable; but, by observing the care we have recommended in the management of the beds, the time may be shortened a year, an advantage which is worth many times the necessary labor to be bestowed.

Fall treatment.—After the tops have become brown in the fall, cut them off, and remove them from the bed; then dig in a dressing of compost manure, (composed of seven parts rotten dung and 1 part ashes) with the tines of a dung-fork, between the rows, taking care not to disturb the crowns of the plants, rake the surface, and strew salt and ashes over the beds.

Spring Treatment.—As soon as the frost is out of the ground, fork in between the rows about an inch in depth, of the compost recommended above, then rake, and strew a mixture of salt and ashes, in equal quantities, over the bed, freely. Should the weather prove dry, the watering pot must be often used.—Occasional waterings, in dry weather, with solutions of soot, as before recommended, will greatly promote the growth, and increase the size of the Asparagus. A *rich, deep, light, open soil, cleanliness, moisture, periodical applications of manure, salt and ashes,* are the great conditions necessary to ensure productiveness to Asparagus beds.

Setting out Cabbage Plants, &c.—If you have hot-beds, and were so provident last month, as to sow Cabbage seed to grow plants for early heading, towards the latter part of this month you may, in any state south of the Susquehannah, transplant your plants in the open ground. To prepare them for this translation from the warm quarters in which they have been raised, the glasses of your hot-beds should be raised every good day and the plants well aired.

The ground in which you may plant them out, should be liberally manured with stable and barn-yard manure, deeply and neatly dug, and thoroughly raked, and then receive a free dressing, to be put on broadcast, of a mixture of ashes and plaster, when your bed will be prepared to receive the Cabbage plants, which should be set about 2½ feet apart either way. Your plants in, sow salt on the bed sufficient to whiten the surface.

If you took our advice last autumn, and set out cabbage plants as we advised you, as soon as the weather becomes settled, give your plants a working, and dust over the bed a mixture comprised of 2 parts ashes, 1 part plaster and 1 part salt.

Peas.—As soon as the frost is out of the ground, manure a bed for peas. Let the dressing of manure be tolerably liberal, the spading be neatly done, to the full depth of the spade, the ground well raked, the drills be made 3½ feet apart, 2 or 3 inches deep; drill in your peas, cover, and give the bed a free broadcasting of a mixture composed of 6 parts ashes and 2 parts plaster.

In about ten days after sowing your first bed of peas, prepare more ground and drill in more peas, so as to prolong your supply of this delicate and delicious vegetable. By putting in a *few rows* every 10 or 14 days during this and the two succeeding months, you may secure a succession of peas throughout the season, without occupying a great deal of room in your garden.

When your peas begin to throw out runners, earth up, and stick them.

Beans—Unless the frost should continue to hold the earth locked up, you may sow Windsor beans, about the middle of this month, or as soon before, or after, as, from the absence of frost, the soil can be put in good order. Prepare the ground as for peas, and make the drills 2 feet apart. To continue

a supply throughout the season, plant a few rows every ten days throughout April.

Lettuce.—If you have lettuce plants, set them out as soon as the soil is in a condition to be put in thorough order. Sow seed at intervals of two weeks throughout the spring, to ensure a continuous supply of crisp heads of lettuce.

Radishes.—Radish seed may be sown in open culture any time after the frost is out of the ground and the soil can be put in good order. They delight in a rich sand, and should be manured with well rotted manure, and receive a top-dressing of ashes.

Early Turnips.—If you desire to raise the earliest turnips in your neighborhood, either for your own table, or for market—and there is no vegetable when raised *really early*, which finds a readier market, or better price—prepare a compost thus—3 parts horse dung, 2 parts cow dung, 2 parts ashes, and 1 part bone-earth, mix the whole together, and let it lay in bulk from 10 to 12 days, then give to your bed—which should either be a deep rich sand, or a deep rich sandy-loam—a pretty free dressing of the compost, spade it in as deep as you can, then rake, and broadcast the residue of your compost over your bed, *rake* that in; then sow your seed thinly, rake it in *lightly*, then sow over your bed a dressing of equal parts of plaster and salt, and finish by rolling with a light garden roller. *So soon as the turnips come up*, go over your bed with a basin of fish oil in one hand, and a mop in the other, and give the young plants a free sprinkling with the oil.—Repeat this operation three or four mornings in succession, early, and you will save your plants from the fly and flea.

When the plants get a few inches high, thin them out, so as to stand 8 or 10 inches apart, and give them, at intervals of 8 or 10 days, three workings, in all, with the hoe, and you will be rewarded for your labor by a large crop. The *Early Dutch* Turnip is the best kind to sow now.

Spinach.—Every two or three weeks, throughout the spring, prepare a bed, and sow a few drills of spinach seed. Take care to drill the seed in very thinly, and, when the plants require it, work them with the hoe, to keep them clean, and thin them out so as to stand about 4 inches apart—the drills 1 foot apart.

Carrots and Parsnips.—About the middle of the month, drill in a few rows of seed of each of these excellent roots for early use. The drills of the carrots should be 12 inches apart—those of the parsnips 18 inches asunder. The Carrot plants must be thinned out so as to stand 4 inches apart—the Parsnips 6 inches. Each must be kept clean, and each should be manured with a compost of 7 parts well rotted manure and 1 part ashes. Top-dress the Carrots with a mixture of equal parts of salt and plaster—the parsnips with plaster. Let this dusting be done in early morning.

Beets.—Drill in a few rows of the seed of the *Blood red* beet; prepare the ground as for the two preceding roots—keep the earth clean, and thin the plants out, so as to stand from 8 to 12 inches apart. Dust them free in the early stages of their growth with plaster and ashes, mixed in equal quantities.

Small Sallading of all kinds may be sown after the middle of the month, or as soon as the frost is out of the ground, and should be continued to be sown at intervals of 2 weeks throughout the season.

Sowing Asparagus Seed.—Asparagus seed should be sown as early this month as the ground can be put in good order. For the mode of preparing the ground, &c. see the paragraph above, under the caption of "*Cultivation of Asparagus.*"

Asparagus beds.—These should be cleaned off, as soon as the ground can be well worked.

Onions.—If you wish to raise a good crop of onions from the seed this season, you must prepare a bed and sow them as soon as the frost is gone, and the soil can be got in good order. In the meantime, prepare a compost as soon as possible, in the following manner. For a bed 30 by 20 feet, take 7 bushels of well rotted stable manure, 1 bushel of ashes, and ½ a peck of salt. Mix the whole well together, and throw it up into bulk—after a few days, shovel it over, and let it remain in bulk until wanted for use. When the time arrives for preparing your bed, spread one-half your compost on, and dig it in to the full depth of the spade, let the upturned earth be well raked as the spading progresses. Your ground being thus spaded and raked, spread the other half of the compost thereon, and rake it in. Then lay off your bed into beds of 4 feet in width, with alleys 1 foot wide between them, east and west. Then draw drills 12 inches apart, 1 inch deep, and drill your onion seed therein as thinly as possible, cover with the rake, and pat the earth over the seed with the back of your spade.

When the plants come up and are large enough for the operation, thin them out so as to stand 3 or 4 inches asunder in the rows. Neither weeds nor grass must be permitted to grow between the onions. Give them 3 hoeings at intervals of a few days when they are quite young: all the weeding between the onions must be done with the fingers and thumb, as the roots are very delicate, and it will not do to injure them with the hoe. In hoeing, the *bulb must not be earthed up;* the object being to keep down weeds and keep the earth open, and *not to hill* the bulb of the onion.

Should the season prove dry, the onions must be watered every evening, or every second evening, at farthest. Weeds or grass must not at any time be permitted to be in the onion bed; but after the onions begin to form their bulbs, the *hand*, and not the hoe must be used in their eradication; should, however, the surface of the ground between the rows become hardened, the *hoe may* be used, carefully, in the middle of the rows, but not near the bulbs; all the work in that quarter must be done with the fingers and thumb. A decoction made of 6 quarts of soot, and 30 gallons of water, if used in watering the onion when young, will prove highly protective from the worm which sometimes attack it, as well as promotive of the growth of its bulb.

Celery—Sow Celery seed about the beginning of the month, the plants will be ready to set out in May.

Borecole or Curled Kale.—Towards the end of the month sow the seed of this, for autumn use.

Red Peppers.—As soon as the weather is settled, sow the seed of these on a warm, southern exposed border.

Cabbages, Beets, Parsnips, Carrots, Turnips, Onions, &c.—All such vegetables, intended for seed, should be set out as soon as the frost is out of the ground.

Early Potatoes cannot be planted too soon after the ground is free from frost.

Horse Radish.—If you have none, set out a bed of this most excellent condimental vegetable as soon as the frost is gone.

Rhubarb.—This is the month to set out plants of

this vegetable. A dozen or two roots will be enough to supply a tolerably sized family with the material for pies.

Garden Fruit Trees.—Such of your fruit trees in your garden, as may need pruning, should be pruned this month; but recollect, that the indiscrimate cutting off of limbs and branches, does not come within the meaning of the term. No limb but a *dead* one should be cut off, and that should be cut down into the sound wood; the wound should be made smooth, after being sawed off, with a drawing-knife, or some other sharp tool, and the wound covered with a plaster to exclude the air, in order to preserve it from corrosion, and encourage its healing—no branch should be taken off unless it interlaps another and excludes the air. When pruned, give them a dressing of manure.

Shrubbery, of all kinds, needing it, may now be trimmed, and should have a little manure dug in around the roots.

Gooseberries and Currants.—These may now be trimmed. The operation should be performed with care. If a new plantation be needed, the cuttings can now be set out. Give the bushes a dressing of well rotted manure and ashes.

Raspberries.—These should now be pruned and tied up. This is also a good time to plant out the suckers. Work in some well rotted manure and ashes, around the roots of the old bushes, to encourage their fruit-bearing.

Strawberries.—Clean off your strawberry beds and give them a dressing of manure. After working in your manure, carefully, dust your bed with salt and ashes, mixed in equal quantities, put long straw between the rows, or if you have it, tanners'-bark will answer as well,—or you may combine the two together.

In times of drought, make your gardener water freely, but teach him, that he must hold the rose or nozzle of the watering pot well down to the ground, so as not to wet the flowers of the vines, as if he does so, he will wash off the farina, and prevent their fruiting. If you manage your bed thus, you cannot fail to have a full crop of fruit, unless the elements war against you.

Before we conclude, we would express the hope, that if there be a Homestead among our readers, deficient in *Shade trees*, in *Shrubbery*, in *fruits*, and in a *garden*, that the *Ladies*, whose province it is to direct such matters, will so work upon their husbands and fathers, as to have such deficiencies supplied,—as a country residence without these appliances, is really a sad affair, whereas, one with them, is, among all the sources of delight of this world, the one most to be appreciated—the home amongst all others, the most to be admired and loved.

THE NEW YORK AND NEW JERSEY PHOSPHATE OF LIME.

To the inquiry of our Washington correspondent, W. C. R., concerning the discovery of Phosphate of lime in these two states, we have to observe, that as far as our information goes, both deposits have been partially worked; that analyses of each have been made, the results of which have demonstrated, that they are rich in bone-earth, or, in other words, phosphoric acid, the substance in bones, which give to them their chief agricultural value. Parcels of these phosphates have been prepared with Sulphuric Acid, but as yet, sufficient time has not elapsed to test their relative value, as compared with bones, by a series of well conducted experiments—of the favorable nature of these results, no doubt can be entertained, as phosphoric acid, whether found combined with lime in the quarry, or in the bones of animals, will, on being applied to the soil, vindicate its efficiency—will perform its specific offices—in urging forward the growth of vegetables, and elaborating their fruits.

We are not aware that any considerable quantity has, as yet, been brought into the market for sale, *though we have seen accounts of some having been sent to England, and there sold at a tolerably high figure.* Why the American Farmer should not have the *first* chance of testing its virtues, and profiting by them, is not for us to say. It may be, that speculation has a finger in the pie, and that, by sending the article abroad to earn a foreign reputation, those engaged in preparing it expect to enhance its value at home. *England*, for years, has been deriving more than a moiety of the bones collected in our country, to the injury of our own soils; and we did hope, when we saw the first announcement of the discovery of these deposits, that patriotism would so far over-ride commercial cupidity, as to preserve this native supply of phosphates of lime for our own domestic use, because, we do know, that the home market would prove ample for the consumption of all that could be got out and prepared for sale.

By the way, it is opportune to the occasion, to mention here, that the late professor *Ducatel*—whose Geological Survey of *portions* of our State added millions to the value of our soil, by unfolding its vast mineral resources—but whose distinguished services were cut short by unwise legislation—by the repeal of the law under which he acted—discovered some deposites in Alleghany County, which, evidently, from his description of them, possess a large per-centage of phosphoric acid. He found the deposite just as he was closing his survey for the season, and had not time to determine the extent of the bed, or the exact nature of the substance, but intended to return to the scene of his discovery the ensuing spring; but, as we have just premised, the law was repealed, and he deprived of opportunity of realizinghis intentions.

From the account given by professor *Ducatel* of his discovery, we are firmly of opinion, that the deposite he found was one of phosphate of lime, and we are as firmly of the opinion, that it is the duty of the Legislature to employ a *competent* Geologist and Mineralogist to re-examine the ground designated by professor D., in order that, if so valuable a manure as is *phosphate of lime*, without which no plant can perfect its seed, be within our bor ders, a source of supply may be opened to the agricultural public.

In connexion with this subject, a correspondent residing near Alexandria, Va. makes the following suggestion, which we commend to the attention of those interested:

"Since the discovery of the "inexhaustable" beds of Phosphate of Lime in New York and New Jersey, it has occurred to some of us in this section of Virginia, that a lucrative business might be done by the employment of vessels to bring it as ballast to Alexandria, and there take in Cumberland coal. I believe there is constant demand for vessels at that port to take off the coal coastwise, if not to foreign ports."

Guano Agency—Fitzgerald, Booth & Co. of this city, we learn, have been appointed agents for the sale of Peruvian guano, by the General Agent.

AMERICAN FARMER.

BALTIMORE, MARCH 1, 1852.

TERMS OF THE AMERICAN FARMER.

$1 per annum, in advance; 6 copies for $5; 12 copies for $10; 30 copies for $20.

ADVERTISEMENTS—For 1 square of 12 lines, for each insertion, $1; 1 square, per ann., $10; ¼ column, do. $30; 1 column, do. $50—larger advertisements in proportion.

Address, SAMUEL SANDS, Publisher,
At the *State Agricultural Society Rooms*, No. 128 Baltimore st. over the "American Office," 5th door from North-st.

EDMUND RUFFIN, OF VA., *Agriculturist*.—The article with the above caption in our journal to-day, will well repay the time to be devoted to its perusal. Besides the well merited compliment which it pays to one of the most enlightened practical farmers in our country—one whose pen, enterprise, and example have wrought a revolution in the practices of agriculturists—the facts and statements which it contains must serve to arm hundreds with that courage and determination to improve their lands, which, in the attainment of their object, repudiates every idea of failure.

To Correspondents.—We have on file or in type, a number of communications, letters, editorials, &c. which we designed publishing in this number—also answers prepared to various queries propounded to the Editor by correspondents. Among the communications is one from Prof. Gilham, which we regret our inability to present this month—also one from Mr. George Cox, of Carroll Co. and another from Mr. Chisolm, of S. C.

"Notes of an excursion to Eastern Va." Letter 3d, by "S." is in type, and was ready for this No. but we are compelled to defer it to our next, much to our regret.

A Biographical Sketch of the Hon. J. S. Skinner, also intended for this number, is crowded out, but will certainly appear next month.

"C. O. P." is received, and we hope to be able to give it in our next—also a communication from J. H. Roy, &c.

Communications from E. Reynolds, and "Bruington," on the Pea Culture, are received, and will appear in our next.

The Wheat.—An intelligent correspondent in Virginia, under date of 30th Jan. gives the following gloomy appearance of the wheat crop:

"Our crops of wheat in Lower Virginia never, in my recollection, presented a more unpromising appearance—that which was sown early looking no better than the late sowing. Our wheat fields generally present the appearance of land newly plowed and harrowed, hardly any vegetation visible, although they have been covered with snow the greater part of the present month."

A correspondent in Caroline Co. Va. gives a similar account:—

"We have had thus far a most severe winter, and I have never seen in my life the crop of wheat looking so badly as it is at this time; a great deal of the last sown wheat has scarcely come up at all, and I begin to fear never will, as the ground has been frozen up ever since 15th of Dec. with the exception of three or four days. We made fine crops of corn in this section last year, and I think the tobacco crop was also good."

☞ The Proceedings of the Md. State Agricultural Society, on another page, will be found of deep interest.—Among other matters, it will be seen that the Society has determined to have a fair trial of REAPING MACHINES, at the next harvest, and we ask the favor of our brethren of the Press throughout the Union, to give that portion of the proceedings a special notice.

☞ *New Subscribers*.—New subscribers to the "Farmer" have been pouring in upon us since the commencement of the new year—to all such, we have forwarded the work from January, except where otherwise ordered—We can supply from the beginning of the volume to those who wish it, and we should suppose that most of our subscribers would prefer having the work bound up, at the end of the volume.

A Compliment, of no ordinary character, is contained in the following note from a subscriber in Worcester Co. of this State—

"I cannot refrain from expressing to you the gratification and instruction which I always receive from the pages of the American Farmer. I have known it, and been a reader of its numbers from its first start under the able and zealous superintendence of its first editor, the late lamented John S. Skinner, to the present time, and I can truly say I have never known its pages so well filled with practical results, scientific investigations, and lucid and instructive editorials, and altho' I am a subscriber and an interested reader of the National Intelligencer, still I take more pleasure, a stronger and more abiding interest in the American Farmer, than any paper which I receive," &c.

Soaking Oats in Solution of Muriate of Ammonia.—Our opinion is asked upon the efficacy of soaking oats in a solution of muriate of ammonia, and we say, that the effect of such soak, in our opinion, could operate but temporarily—could only serve to promote the germination of the seed, and, perhaps, to encourage its growth in the commencement of its career. The quantity of the solution imbibed by the seed while in the soak, being so small as to become soon exhausted, and, therefore, not sufficient to influence the quantity of grain. It may destroy the germs of smut, but cannot add to the number of bushels of the crop.

ADDRESS OF JAMES GOWEN, ESQ.—We have been favored with a copy of the *address* delivered by *James Gowen*, Esquire, before the Lancaster county Agricultural Society, at its annual meeting on the 13th of January last. We have read the address with pleasure and profit. It is characterised, throughout, by the bold, candid, practical views of matters and things, for which he has ever been distinguished, and we need scarcely add, that he handles every topic he discusses with zeal, ability, and judgment.

A Maryland Farm.—We call attention to the advertisement of Mr. Morling, offering his farm for sale. It is one of the most eligibly located farms on the Eastern Shore of this State—the county in which it lies, (Talbot,) is one of the best improved in Maryland, and the buildings, &c. are nearly new and of a superior order—It is worthy the attention of any one desirous of obtaining a farm in this beautiful and flourishing section of the State.

ANSWERS TO CORRESPONDENTS.

Meadow.—An enquirer in Chesterfield county, Va., is informed that if his flat creek land is *really* "good,"—he could not desire a better location for a meadow. He is also informed, that *Timothy, Herds-grass,* and *Orchard grass,* are all good: that *timothy,* if he intends his hay for sale, would be the best, because it is the most popular, but that if he wishes his meadow for the double purpose of hay, and pasture, he would find it to his interest to combine all the grasses together; timothy alone, not being calculated for a pasture grass, as, when cut for hay, it does not spring up again during the season; we think too, that if he were to combine *Kentucky Blue grass* with the others, he would find the quantity and quality of his pasture greatly improved, as all pastures are enhanced in value by the multiplication of good sorts of grasses. But before he sets his meadow, *he should be sure that his land is really fertile, and has lime in it.* If not sure of these facts, his safest plan would be to give it a liberal dressing of putrescent manure, and apply a top-dressing of ashes, or lime, (the lime to be slaked with strong salt brine) to the soil at the time of seeding. For meadows, low lands, if in good heart, and *not wet,* are preferable to high lands, as they are more moist than the latter.

Of the kind of manure.—As to the question whether Bone-dust, Plaster, Ashes, Guano, would not be best, we would say, that they are each good in their way. But if we were about to set a field, or lot, in grass, that required the aid of fertilizers, we would form a compost of stable and barn-yard manure with woods-mould, river or creek mud, bone-earth, ashes, plaster, and salt, put it in bulk, let it remain a few weeks, then shovel it over and apply it with a very generous hand; in such compost there should be at least in the proportion, to the acre, of 4 bushels of bones, 10 bushshels of ashes, 1 bushel of plaster and 2 bushels of salt—of the other substances, at least 20 double horse-cart loads.

Of the preparation of the ground.—The land should be deeply and accurately ploughed,—and if subsoiled, so much the better—thoroughly harrowed, and rolled; the seed should then be sowed, lightly harrowed in, and the ground then rolled.

As to the time of seeding.—We prefer sowing all grass seeds in the months of August and September, and to give an impetus to the growth of the plants, we would, in addition to the manure to be ploughed in, top-dress with 100 lbs. of Guano, 25 lbs. of plaster, and 1 bushel of salt, per acre. This should be thoroughly mixed together, sown broadcast, and harrowed in before sowing the grass seeds.

As to the best mode of transporting lime.—Where the distance of transportation is great, its removal in barrels or hogsheads is the preferable mode, as it should be protected from the weather until applied.

Baltimore Lime.—The lime burnt near, and sold in, the Baltimore market, is among the purest in the country. Agricultural lime can be had here (see advertisements) at 6 to 6½ cents, or delivered any where on the shores of the Chesapeake or its tributary streams, at 8 cents per bushel.

Guano as manure for Tobacco, Corn, Wheat.—We believe that guano will pay well, if properly applied, to either of these crops; though we are of opinion, that when applied to tobacco and corn, after the guano—which should be mixed with plaster, or plaster and salt—is ploughed in, the ground should receive a top-dressing of ten bushels of ashes per acre; both tobacco and corn being large consumers of potash. To ensure a large yield of tobacco or corn, we would apply 400 lbs. of guano, 1 bushel of plaster, and 2 bushels of salt, per acre—for wheat, one-half the quantity would answer.

We are not prepared to say which of the artificial manures alluded to, is best; their respective value is only to be determined by the peculiar wants of the soil to which either may be applied, and those wants can only be ascertained by analysis.

Should our correspondent carry out his contemplated improvements, we should be happy to hear of their results, whether successful or otherwise.

Ploughing an Orchard.—"J. J." is informed, that it is not material whether he ploughs the land towards or from the trees of his orchard; the great object being to break up the ground, let in the atmosphere to meliorate the condition of the soil, and predispose it to give up its elements to the roots of the trees. Previous to ploughing, he should give each acre of his orchard a dressing composed of 10, 15, or 20 loads of wood's-mould and leaves, marsh mud, or any kindred substances, 10 bushels of ashes, 2 bushels of salt, and 1 bushel of plaster. In ploughing, he should be careful not to plough so deep as to lacerate the roots of the trees. In digging round the trees with the hoe, he should observe the same care, and he would add to the value of the basins which he forms around his trees, by spreading on them litter of any kind; mulching of trees—especially young ones—has a most salutary effect, in attracting and retaining moisture. Such *litter* should, on the approach of winter, be removed, otherwise it would serve as a harbor for field-mice.

Agricultural Society of Washington Co. Md.—A meeting of farmers of Washington Co. was held at Hagerstown on 20th Jan. for the purpose of taking into consideration the formation of an agricultural society.—Andrew Hogwine was called to the chair, D. Zeller and D. H. Keedy appointed Vice Presidents, and Dr. T. Maddox and R. H. Lawrence, Secretaries. On motion of Hon. J. T. Mason, a committee was appointed to name officers for the permanent organization of the Society, who reported the following, which were elected, viz:

President—David Brumbaugh. Vice Presidents—Jacob Miller, Isaac Motter, John T. Mason, Hy. Ankeny, John D. Hart, G. S. Kennedy, Wm. B. McAtee, Jacob Mullendore, and Jacob Fiery. Recording Secretaries—Jos. P. Mong, Solomon Rohrer. Corresponding Secretary—John W. Kennedy. Treasurer—Henry K. Tice. Executive Committee—Dr. Thos. Maddox, Wm. Dodge, Dr. E. L. Boteler, Dr. E. Bishop, John Shafer, A. Leiter, David Zeller, Jacob H. Grove, Col. John Bowles, George C. Rohrer, G. L. Zeigler.

At a subsequent meeting, a constitution was adopted by the Society.—Let their motto now be "Perseverance."

Mould and Litter.—We call the particular attention of our readers to the communication of Mr. *Blount,* on page 314 of this number. The facts he details, in relation to the meliorating effects of wood's-mould and litter are overwhelming, and must strike conviction in the mind of all, as to the nutritive properties of the substances named.

SHEEP HUSBANDRY.—Messrs. William Brewer, Benj. White, and P. H. M'Leod, a committee of the Medley's District Agricultural Society of Montgomery Co. Md. have recently presented a very interesting report, on sheep husbandry, showing its growing importance, and recommending its gradual enlargement by the farmers of the county—yet the committee acknowledge that "this species of property is very uncertain, from the ravages of dogs, and requires the passage of a dog law by our legislature, ere the farmers of Maryland could prudently increase their flocks beyond the immediate consumption of his family." The committee furnishes much statistical information upon this important subject. It is shown by the census returns, that the demand for 1850, exceeded the domestic supply by 18 millions of pounds, which had to be imported, and that several of our small manufactories had to stop for want of wool.—The clip for 1851 is estimated at 70 million pounds, worth 21 millions of dollars, (at the minimum price of wool during the past 8 years,) and when the sheep and lambs butchered annually are taken into the account, the importance of this department may be properly appreciated. The climate of this state is considered decidedly preferable to the Northern sections of the country for the profitable raising of sheep.—The "committee find that in all the States where sheep husbandry is encouraged, laws have been passed taxing dogs and indemnifying sheep owners for their ravages. New York, Vermont, Pennsylvania, Virginia, and several of the western States were obliged to pass dog laws ere they could succeed well in this profitable branch of husbandry. Hence, your committee would urge strongly the signing of a memorial praying for the passage of a law taxing dogs; said tax going to the payment for all sheep killed by dogs, when the owner of the dog committing the ravages could not be found out, or when insolvent." The committee recommend a memorial to the Legislature now in session upon the subject, which was adopted by the Society, and promptly carried into effect—and we are gratified to find that the memorials have been subsequently presented to the Legislature by the delegation from Montgomery. Let every society in Maryland adopt a similar course, and let every farmer in the State, individually urge upon the delegates from his county the importance of this subject,—let this be done without delay—and this barrier to the advancement of a great branch of the agriculture of the State will be broken down. The thanks of the farmers of Maryland are due to this society for its praiseworthy and prompt movement in this matter.

TOP-DRESSINGS FOR WHEAT.—As we are frequently asked what would be good top-dressings for wheat, we will prescribe the following, for an acre:

No. 1.—100 lbs. Guano
1 peck Plaster
1 bushel Salt,

to be well mixed together, sown broadcast on the land, and harrowed and rolled, or rolled in.

No. 2.—5 bushels of Ashes
2 " of Bone-dust
1 " of Salt,

to be well mixed together, sown broadcast on the land, and harrowed and rolled in, or rolled in.

No. 3.—1 load wood's-mould
2 bushels Ashes
1 bushel Plaster
12½ gallons Urine,

to be well mixed together, and applied as above directed.

We give the above because of the inquiries made of us, though we are free to say, that it is better to apply manure at the time of ploughing for the wheat. Top-dressing of wheat can only be justified by the necessity of the case. All strong concentrated animal manures are the more useful when buried by the plough. We have, however, not the slightest doubt, that the nitrogenous portions of the above manures, may, by the agency of the plaster and salt, be sufficiently *fixed*, to enable the wheat crop to be materially benefitted by their application, though the several composts, of which they form parts, are only harrowed in, provided the ground be also rolled.

Edmund Ruffin, Esq. has been elected President of the Va. State Agricultural Society. A bill has been introduced in the House of Delegates of Va. incorporating the State Agricultural Society, and providing for the establishment of District Agricultural Societies throughout that State. It is also proposed in the bill to endow each society with a moderate annuity from the public treasury, on condition of an equal and reciprocal contribution from the individual members of such counties. An Agricultural Commissioner and two Agricultural Chemists, to be appointed by the State Agricultural Society, are also provided for in the bill.

The "Plow" published in New York by *Solon Robinson*, in an article, speaking of *our journal*, says:

"It has a large circulation, and is very popular; but "*is too much given to puffing prepared guano and other quack manures.*"

In making the assertion contained in the words italicised by us, the editor has gone out of his way, to do us an act of unmerited injustice and wrong, and that too, regardless of truth. We have never been the puffer of "prepared guano" or other "quack manures;" nor have we ever been a travelling *drummer* for the sale of *real guano*. We have left the virtues of the artificial, and other manures, to be tested by the experience of farmers, on the one hand, while on the other, we never could get our own consent to be taxing the hospitality of the agricultural community, while we were peddling manures of any kind, believing that the usefulness of the editor of an agricultural journal can only be unimpaired, so long as he abstains from identifying his interest with those who have such articles for sale. The editor of the "Plow" knows that an editor is not responsible for the advertisements which appear in his pages, or for communications, except so far as he endorses their correctness.

Fine Hogs.—We noticed a fine lot of 5 or 6 Hogs passing by our office a few days ago, of the Chester mixed breed, raised in Harford co. on the farm of F. J. Dallam, esq. of this city; they averaged about 500 lbs. and would be hard to beat.

LOCOMOTIVE STEAM PLOUGH.—We learn from the "American Artisan," that the model of a locomotive steam plough, invented by Mr. A. J. Watson, of 38 Wall street, New York, is exciting considerable attention there. It is intended to plough, sow, and harrow, simultaneously, to drive twelve ploughs, and to work over 30 or 40 acres per day.

Maryland State Agricultural Society.

The quarterly meeting of the Society was held at the Hall in this city, on the 4th ult. at which the President presided. The attendance was small, in consequence of the weather, but several important subjects were introduced and acted on, and others laid over to an adjourned meeting, which was ordered to be held on the 18th of Feb.

Mr. E. Reynolds, of Baltimore, offered the following preamble and resolutions:

Whereas the President of the United States in his last annual message called the attention of Congress to the establishment of an Agricultural Bureau in the city of Washington. Be it therefore

Resolved, That the thanks of this Society be, and they are hereby tendered to his Excellency, the President, for the interest which he has not only on the present, but other occasions, manifested in behalf of American husbandry. Be it further

Resolved, That this Society, regarding as it does, the paramount value of such an institution, at the seat of government, established upon liberal principles, to the the success of an improved system of Agriculture in this country, a committee of ——— be now appointed to proceed to Washington in order to promote the establishment of said institution by using such efforts as may seem most appropriate in their judgments, as well as to press the subject respectfully upon the immediate attention of our Senators and representatives in Congress, urging them to use their best efforts towards bringing up the matter, for the consideration of their respective houses, at as early a day as practicable.

Mr. Walsh, of Harford, offered the following additional resolutions:

Resolved, That this Society highly approves of the proposition to separate from the Patent Office its Agricultural Department, which demands the best services of an independent Bureau.

Resolved, That to do justice to the great interests discussed in the Agricultural Reports annually printed by Cnogress, a Bureau of Agriculture is indispensable. Said Bureau should have no connection with the Census Office, Patent Office, or any other, to divide the time, the thoughts, and efforts of its head, to the neglect of agriculture.

Resolved, That the farming interest has been too long neglected, and that the policy first distinctly developed by President Washington, in his last annual message to Congress, ought to be adopted without longer delay.

Mr. Calvert, President, moved as an amendment, that instead of a bureau, under the management of any one of the present departments of the government, as proposed in the resolutions, that it be recommended to Congress to make provision for a distinct branch of the government, to be styled the "Department of Agriculture," similar to that of France and other nations, and that a Cabinet Minister be placed at the head of the same—and that the subject be recommended to the earnest consideration of the Agricultural Societies of the United States, for their co-operation.

The resolutions, as amended, were then adopted.

Resolutions from the Pa. State Agr. Society, for the establishment of a National Society at Washington, were read, and on motion of Wm. C. Wilson, esq. were concurred in, and the President was authorized to appoint a delegation from this state to attend the meeting of the same—to consist of the President as chairman, and one member from each Congressional District.

The President was authorized to appoint a committee (of which he was requested to act as Chairman,) consisting of one from each Congressional District, to proceed to Washington, to promote the object set forth in the resolutions relative to the establishment of an Agricultural Department, and to consult with the Senators and Representatives in Congress from this State—Committee, Ch. B. Calvert, Ch'n., Ed. Reynolds, of Balt. city, G. W. Dobbin, Howard Co., H. G. S. Key, St. Mary's Co., J. C. Walsh, Harford Co., Jno. M'Pherson, Frederick Co. and W. H. Jones, of Somerset Co.

The subject of the Inspection laws of this state, was introduced to the meeting, which, with other matters of interest, it was deemed proper to postpone to an adjourned meeting. On motion, it was ordered, that the meeting adjourn to Wednesday, the 18th Feb. and the Secretary was directed to give public notice thereof in the city papers.

WEDNESDAY, Feb. 18, 1852.

The adjourned meeting of the Society was held this day. J. T. Earle, Esq., Vice President for Queen Anne's county, was called to the chair. A telegraphic despatch was received from Mr. Calvert, President, stating that, in consequence of being confined by sickness, he could not be present.

The proceedings of the last meeting were read—when Mr. McHenry, of Harford, asked of the chair, if any action had been taken by the committee appointed at that meeting in relation to a Department of Agriculture. The chairman not being present, no positive answer could be given. Messrs. Reynold and Walsh, two of the committee, present, thought that no steps had as yet been taken—whereupon Mr. McHenry moved that the subject be reconsidered. Col. Hughes, of Anne Arundel county, seconded the motion. Mr. McH. urged the adoption of the motion, upon the ground of the small number of the members of the Society who were present at the meeting at which the resolutions were adopted—that the subject involved a question of a most delicate nature, as to the constitutional right of the Government to carry out the object recommended in the resolutions—that, notwithstanding President Washington had urged the subject upon the attention of Congress, yet many of the ablest statesmen of the country differed with him upon the same, and that it was not proper for so small a meeting as that which adopted the resolutions, to commit the Society upon so important a question, which he did not think would be sustained by a more general attendance; and, in case the subject was reconsidered, it was his object to move to postpone its further consideration to the next annual meeting.

Col. Hughes, in seconding the motion, said that it was not for the purpose of expressing any opinion on the merits of the question, as he had not given it his attention, but in consequence of the thinness of the meeting by which so important a matter had been considered.

Col. W. W. W. Bowie, of Prince George's, said it was not competent for this meeting to reconsider a question which had been settled by the last, but that the desired object of the mover could be attained by recommending or instructing the committee appointed to postpone any action until the next annual meeting of the Society.

Col. Carey, of Baltimore, coincided in the views

expressed by Col. Bowie. Several other members took part in the discusssion, when the chair decided that the motion of Mr. McHenry was in order, and the question being put thereon, it was decided in the affirmative.

Col. Carey then offered the following resolution, which was adopted:

Resolved, That all further proceedings under the motion made at the last meeting of this society, for the appointment of a committee to visit Washington, to urge the establishment of an agricultural department, be postponed until the next annual meeting of the society.

Col Walsh said that as one part of the proceedings of the last meeting had been, in effect, annulled, in consequence of the slender attendance thereat, to be consistent, the society should go farther, and rescind all the other business transacted, and made a motion to that effect, but afterwards modified his motion, so as not to include the unfinished business.

Col. Hughes seconded the motion, and it was adopted.

Col. Bowie moved a renonsideration of the vote just taken, which was concurred in.

Mr. Sands thought, that we had in the decision just made in regard to the Agricultural Department, treated the last meeting with disrespect; and by the adoption of the motion just offered, would also act discourteously towards a sister society, which we had been accused of doing on a former occasion. The resolutions presented at the last meeting from the Pa. State Society, had been concurred in by this, a delegation ordered to be appointed to attend the proposed National Convention, and the Pa. Society notified thereof. Mr. S. said, that there had been no opposition manifested to this branch of the proceedings, and all who had alluded to the subject, approved of the action in relation to it.

Mr. Walsh explained, that his objection was not to the measure itself, but that, as we had, for the reasons stated, undertaken to reverse the action of the last meeting, we should go still further and repeal all other proceedings then completed.

After some further discussion, on motion of Mr. M'Henry, it was resolved that the decision of the last meeting, relative to the appointment of a delegation to the proposed National Agricultural Convention, be renewed.

The subject of the inspection laws of the State, introduced at the last meeting, was then called up.

Col. Hughes remarked, that at the last annual meeting, a committee consisting of Colonel Carey, Ramsay McHenry, Esq., and Dr. D. Stuart, was appointed to investigate this subject, and to report to the quarterly meeting of the society, and called for their report.

Col. Carey, chairman of the committee, stated the reasons why the committee had not fulfilled the duty assigned to them—that the question under consideration at the annual meeting was the inspection of guano alone, but in the published proceedings it was made to appear, by an error of the Sec'ry at that meeting, that the whole subject of inspections was referred to the committee, which embraced so great an amount of labor and investigation, that the committee had not felt at liberty to undertake it, without further instructions; but that if it was the wish of the society that they should act in the premises, in accordance with the instructions as published, the committee would proceed to the discharge thereof.

Col. Bowie then offered the following resolution, which was adopted:

Resolved, That the special committee on inspections, appointed at the last meeting of the society, be instructed to report at the third quarterly meeting (in August) of the board of managers, and that the committee take into consideration the subject, including all the existing inspection laws of the State.

Col. Walsh, of Harford, called the attention of the society to the importance of a change in the present mode of awarding the premiums for certain objects, which he specified, and to correct which he offered the following preamble and resolutions:

Whereas, It being a matter of considerable importance to the agricultural community of our State, that all farming implements, especially those involving a considerable expense in their purchase, and which, if properly constructed, would be profitably and extensively used, should be properly tested, and their merits and demerits made known by a fair and impartial examination and trial, it is therefore

Resolved, That a committee of——members be appointed by the chair, whose duty it shall be, at some convenient period during the ensuing harvest, to examine any reaping or mowing machines that may be presented to their notice, and to report to this Society, at its annual meeting in October, an opinion of their respective merits, based upon their actual performance in the field. It shall be the duty of said committee to give notice in the public prints of the time and place selected for the trial. It is further resolved, that, to the exhibitor of the machine possessing the most valuable properties, as decided by the committee, a premium of $— shall be awarded by the Society.

Resolved, That a committee of——members be appointed by the chair, who shall, at as early a day as practicable, invite the proprietors of the several hay or straw presses now in use, or any others which may be exhibited, to an actual test of their qualities in presence of said committee; and, to the exhibitor of the press decided by it as most deserving, a premium of $— shall be awarded by the society.

The resolutions were read, and unanimously adopted.

Col. Walsh moved that the first blank in each of the resolutions be filled with "5"—Col. Hughes moved "12," which was accepted by the mover, and adopted.

Mr. Walsh also proposed that the premium for the best reaper be fixed at $50. Edward Lloyd, jr. Esq. of Talbot moved $100—which was adopted.

The second blank in the second resolution was, on motion of Col. Hughes, filled with $50, for the best hay press.

Committee on Reaping and Mowing Machines—Col. Edward Lloyd, Col. George W. Hughes, Col. W. W. W. Bowie, Col. Charles Carroll, Gen. Tench Tilghman, Colonel John Tilghman, William T. Goldsborough, Thomas Hollyday, Wm. H. Jones, Matthew T. Goldsborough, James T. Earle and John Lee.

Committee on Hay Presses—John C. Walsh, John Lee, Dr. John O. Wharton, Col. Josiah Ware. Wm. Dodge, Col. Ramsay McHenry, Robert Wright, of Virginia, Robert Y. Stocker, Lewis Washington,

Dr. J. Marlow, Col. George Washington, Col. C. M. Thruston.

Col. Bowie then moved that a premium of $50 be offered for the best Tobacco Press, and that a committee be likewise appointed to make a practical test of the capacity of the machines which may be offered to their inspection, at such time as the committee may select—which motion was adopted.

Committee on Tobacco Presses—Col. Wm. D. Bowie, A. Bowie Davis, Clement Hill, Sprigg Harwood, Richard T. Mercer, Daniel Kent and Ed. Reynolds.

Dr. Wm. H. DeCourcy remarked to the meeting, that his attention had been called by a communication in the January No. of "The Farmer," from a venerable friend of his, the Hon. Wm. Carmichael, to a subject of much importance to the agriculturists of the state. Mr. Carmichael suggests the formation of a board of agriculture, to be appointed by the Legislature, to examine and report to that body the product of the various crops of the State. He, (Dr. DeCourcy,) thought the information desired to be obtained most important, but he suggested with great diffidence, whether it might not be equally well done through the agency of the Society, whilst it could at the same time be freed from the obligation of its degenerating into a political reward. The smallest and most insignificant offices are sought with avidity. It should be both the duty and pleasure of every member to render all the information in their power. He did not expect from either mode entire accuracy, yet an approximate estimate might be made. The annual meeting of the society was at a period when the wheat and hay crop had been secured,—the corn, tobacco, and other crops could then be tolerably well estimated. Two or three intelligent gentlemen, selected from different sections of the same county, ought to be able to form an an opinion as to whether the crops would exceed, or fall below an average. If this plan should be extended through the several counties, and a report made to the society, he thought it ought to furnish information which would form a data, which might, in some measure, influence the markets. The present sources of information from newspaper reports, are often entirely unreliable—most frequently exaggerating the products. He therefore proposed that a committee of two gentlemen from each of the several counties of the state, be appointed by the chair, whose duty it shall be to examine and report their estimate of the gathered and growing crops, at the annnal meeting of the society.

The resolution was adopted, and the chair appointed the following committee.

Committee under Dr. DeCourcy's resolutions: For St. Mary's County—Col. Sothron Key, J. H. Sothron. Charles County—Gen. John G. Chapman and Col. Wm. Coad. Prince George's—Col. W. W. W. Bowie and J. D. Bowling. Calvert Co. —George W. Weems and Daniel Kent. Anne Arundel County—Col. Geo. W. Hughes and N. B. Worthington. Howard County—George W. Dobbin and Gen. J. W. Tyson. Montgomery—A. Bowie Davis, E. J. Hall. Frederick—John Lee, Davis Richardson. Washington—David Brumbaugh, Andrew Rench. Alleghany—Col. C. M. Thruston, Dr. Samuel P. Smith. Carroll—George Patterson, Col. Ege. Baltimore Co.—Col. Wilson M. Carey, Henry Carroll. Harford—Col. Ramsay McHenry, John H. Price. Cecil—Rev. James McIntyre, Major Thomas M. Forman. Kent—George Hollyday, Wm. T. Smith. Queen Anne's—Dr. Wm. H. DeCourcy, Alexander W. Thompson. Talbot—M. T. Goldsborough, Jos. Price. Caroline—Jesse Pearson, Thomas Stewart. Dorchester—Dr. Joseph E. Muse, Wm. T. Goldsborough. Somerset—Isaac D. Jones, W. H. Jones. Worcester—Gen. W. H. Handy, Wm. W. Purnell.

Mr. M'Henry offered the following resolutions, which were adopted:

Resolved, That in the opinion of this society, the establishment, by statute, of standard of measure or weight, for the sale of potatoes and apples, bulbous roots and fruits generally, would greatly promote the convenience and interest of producers and fair dealers in these articles of food.

Resolved therfore, That copies of these resolutions, signed by the president and secretary of this society, be forwarded forthwith to the president of the Senate and speaker of the House of Delegates of Maryland, with respectful request that the same be presented to the bodies over which those officers respectively preside.

The Chairman called the attention of the Society to the importance of making an early announcement of the time for holding the annual exhibition, and suggested that the latter end of September would be the most acceptable period for the same.

Mr. Sands moved that in the notice for the next quarterly meeting, (the first Wednesday in May,) it should be announced that this subject would then be considered and decided, which was concurred in.

Mr. Walsh moved that the Executive Commitee be requested to call a meeting of the Society at the same time in May provided for the meeting of the Board of Managers—which was also concurred in, and the Society then, on motion, adjourned.

By order, SAMUEL SANDS, Secretary.

LETTER FROM THE PRESIDENT OF THE STATE SOCIETY.

WASHINGTON, Feb. 21st, 1852.

SIR—I find by the proceedings of the last meeting of the Maryland State Agricultural Society, which I was prevented from attending by severe sickness, that a proposition to reconsider the action of the previous meeting, was entertained and adopted, and a resolution passed instructing the Committee, appointed at the first meeting to carry out certain resolutions, to postpone all action on the subject until the next annual meeting. I feel bound in perfect sincerity to say, that I consider it a usurpation of authority, not warranted by any parliamentary law that I ever heard of, and that as an individual member of that Committee, I will not submit to any such dictation. It was proposed to reconsider the action of the previous meeting because "*many of the ablest statesmen had constitutional scruples on the subject of an Agricultural Department or Bureau.*"

Is it possible that in a *purely* agricultural society so monstrous a doctrine should be sustained, that Agriculturists are too ignorant to determine what the constitution of their country is, and that therefore they must consult the great Statesmen, who are of course politicians, and therefore interested in deciding against them? I maintain that Agriculturists are as capable of deciding the *true* meaning of that instrument as any other profession, and until they assert and act upon this doctrine, their interests will be entirely neglected. It is a new doc-

trine in a republican government, that a majority is to be controuled by a minority, or in plain terms, that the agricultural community, composing three-fourths of the whole, is to be governed by the other fourth, and I trust we shall no longer countenance a proposition reflecting upon our intelligence, but that as a body we will rise in mass and say to "*all our statesmen*" that *it is* constitutional to have an Agricultural Department and Bureau, and unless you carry out our wishes, *we* will select those who will. Congress have committees on agriculture, but what good has ever resulted from them; and why is it that this most important subject has been entirely neglected? It is because the other great interests of the country have Departments, whose head makes annual Reports, and suggests such subjects of legislation as are necessary, which Reports are submitted to the appropriate committees; and until you have such a Department for Agriculture, your committees are worse than useless.

I am the last one to usurp any undue authority, or do any thing calculated to create any division in our *agricultural* ranks, but still I will not be driven *illegally* from an important object, without better reasons being assigned than I have yet seen; and in order to have this subject discussed and better understood, I propose (being a compromise man) that it be taken up at our regular May meeting, in place of the annual meeting, when we have no time for such discussions; and in the meantime I ask every agriculturist and every friend of agriculture, to read attentively the proceedings held on the 4th of February, and say whether there is any thing more therein asked of the Government than our *great interest* should demand and insist upon, and I beg them *as agriculturists*, not to be led away, in determining this question so vital to their interest, by any predilections for either of the Political parties, which have used, and will continue to use and abuse them, so long as they submit to their dictation. In conclusion, I call on the agriculturists of the whole country, to make themselves heard on this subject at this time, if they wish to effect any thing for the improvement of their condition. I beg you to publish the proceedings of both meetings, in order that every one may judge for himself, and act knowingly on the subject.

Very respectfully, your obed't. serv't.

CHAS. B. CALVERT.

To S. Sands, Esq. Sec. of the M. S. A. Society.

MOULD AND LITTER.

To the Editor of the American Farmer—

DEAR SIR:—We are, in truth, in the midst of one of the coldest seasons ever experienced in this section. The earth is completely locked up, and the progress of the plow, for the time being, stopped; agriculturists, consequently, will be backward, yet there are operations on the farm that can be forwarded—such as hauling rails, collecting materials for manufacturing manures, carrying out marl, swamp mud, (previously heaped) and last, though not least, mould from the forest. The forwarding of these operations add to the improvement and fertility of our farms. I have been engaged with hands and teams in hauling litter and mould (previously collected in heaps in the forest with hilling hoes.) on land intended for corn, this year, which is deposited in heaps, 5 by 6 yards. It is my purpose to cover about one-half of my corn shift with this mould and litter, if the season will admit of it, as I have nearly a sufficiency collected to accomplish this. The remaining half I propose to manure liberally broadcast, with stable, hog-pen, barn yard and compost manures.

In regard to this mould and litter, I am informed that I am "robbing Peter to pay Paul;" I answer, that I never expect to cultivate this land—the removing of the mould and litter, will, for the time being, check the growth of timber thereon, yet I defy any one in five years, on the examination of this land, to inform me, whether the mould and litter has been removed;—I admit that the land for the time being will be injured, but, if kept in forest, it will speedily recover. I am further informed, that the cultivated soil is but little if any benefitted by this application, but, fortunately, experience and practical experiments have taught me, as well as others, that by the liberal use of said mould and litter, on land previously marled or limed, that the crops the first year can be doubled:—Col. Saml. Booth, of the county of Surry, (who is one of your subscribers,) has brought his farm to a remarkable state of fertility, by the application of marl, followed by an application of mould and litter, collected from piney old fields—His land was greatly improved by the application of marl, yet after the application of this mould and litter, his crops have rapidly increased. A few years ago, (after the liberal use of marl,) his annual return of wheat was from four to six hundred bushels—last year, from a shift yielding the above, he reaped above one thousand bushels of good wheat. The mould and litter was applied to the corn crop, ploughed in deep—the corn crop followed by wheat—His corn crops have also rapidly increased. Mr. J. Watkins, of the same county, has doubled the produce of his farm by this application—his farm three years ago yielding from 5 to 7 bushels of wheat for one seeded, last year gave the return of 14 for one seeded—His farm was marled ten or fifteen years ago, and was but slightly improved by the marl.—The application of mould and litter he commenced some four or five years ago, and from that period his farm has rapidly improved. *B. Jones*, Esq., near neighbour to Mr. W. has improved his farm in like manner.

In the spring of 1850 I laid off 20 acres of land, (which was marled in 1839 and '40, and which yielded in 1847 three barrels of corn per acre, and five bushels of wheat per acre, in 1848) in checks five yards square, depositing in each check a large size heap of mould and litter, gathered with hilling hoes from a piney old field, giving to each acre 194 heaps—these heaps were regularly spread, and the land ploughed with a two horse plough, running from 7 to 8 inches deep, laid off and planted in corn—from which I gathered in November, *five barrels per acre, giving an increase of two barrels per acre*, and from said 20 acres I reaped 10 bushels of excellent wheat, a good deal of which I disposed of for seed, giving an increase of five bushels per acre. Clover was seeded with the wheat, but killed by the drought. The above applications of mould and litter were all on land previously marled. In the application I am now making, no lime or marl has ever been applied.—The question with me is,—will the benefit from such an application be equal on unlimed land to that derived from limed or marled soils? Mould is a general name for finely divided earthy substance that forms the surface-soil of land, in which all kinds of vegetables strike root and thrive; and experiments go to prove, that plants do assimilate humus as direct nourishment. Dana in his Prize Essay, remarks:—"Mould contains a part

of the carbon, oxygen and hydrogen—or, if you like the terms better,—mould of soil consists of the water, coal and salts of the plants—mould is truly manure." "The soil is the earth on which plants grow—the mould is the manure of that soil."

In Thaer's "*Principles of Agriculture*," he remarks:—"Humus is more or less a constituent part of the soil. The fertility of the land depends entirely upon its presence, for, if we except water, it is to this substance alone in the soil that plants owe their nutriment." Humus is the product of living matter, and the source of it. It affords food to organization; without it nothing natural could have life—at least the most perfect animals could not exist; and, therefore, death and destruction are necessary and accessory to the reproduction of animal and vegetable life."

Voigt, in his supplement to the researches of Saussure, justly observes:—"that vegetable mould is vegetable matters partly decomposed, but not completely disorganized. It is a vast pervading plant—without organization, while itself bears and nourishes other plants, as a tree affords nutriment to all its branches and shoots. This vegetable mould is composed of vegetable bodies, and it may again be transformed into others of the same, or of a similar nature: humus contains less oxygen, but more carbon and nitrogen than the vegetables from which it is derived."

Your ob'dt. servant, THOS. E. BLOUNT.
Sussex Co. Va. Jan. 24, 1852.

FLORAL DEPARTMENT.

Prepared by John Feast, Florist, 279 Lexington st. for the American Farmer.

The past month having been so severe, but little could be done out of doors.—Most all tender plants which have stood the previous winters without injury of any consequence, such as the Cape Myrtles, Pomegranates, Laurels, and many of the Evergreens, have been entirely destroyed, or will have to be cut down, being all killed above the ground, except in some favorable situations, where they were sheltered —Roses have suffered much more than have been known for many years, especially the budded ones;—few of them will survive, which shows that on their own roots they are more preferable, either as standards, or dwarfs, as the roots are seldom injured by the severest of winters. As the season becomes favorable, have every tree, shrub and climber, neatly pruned and in order—have the border in readiness to receive the plants and seeds which are wanted for the season; uncover the bulbous roots, if too thick, of any thing that protected them through the winter, and have the beds in proper order for flowering plants to be planted out.

Herbaceous plants might be separated or transplanted about the middle of the month, or any hardy roots from which an increase is desired.

Dahlias of fine kinds, bring in a warm situation, if wanted early, by separating, or strike from cuttings in separate pots, so that they can be established by the time of planting out in May or June, if the season is favorable.

Transplanting should be done as early as possible of trees and shrubs, and of all plants intended to remain out of doors;—they are more likely to do better than if removed at a later period, when they begin to show signs of fresh growth.

Plants in cold frames will require attention, as *Gilliflowers, Auriculas, Polyanthus, Cyclamens, and Verbenas*; have them repotted, and give plenty of air when the weather is fine.

Azaleas will be in fine bloom this month—Give plenty of water, so that they will not suffer for moisture, which is quite essential when in flower, as they never flower so well treated in any other way.

Gloxinias, Achemenes, &c. bring forward and repot in suitable sized pots, and if convenient, give them the warmest parts of the house, so as to start them into growth, to have an early bloom; but it is not advisable to have all growing early, so keep back some for late bloom.

Cactuses will need more water now that they are showing their buds, in their flowering season; from now to June graft such as are wanted on strong stocks; they are easily managed, and are an ornament to a green house.

Calceolarias, remove to larger pots as they grow; keep them a little shaded and near the glass, and fumigate to keep clean of the fly; syringe occasionally, and keep them growing as much as possible.

Ericas and *Epacrisis*, when done flowering, should be cut in, so as to make bushy plants; propagate from cuttings when the young wood is strong enough; repot such as need larger pots, and give plenty of drainage.

All the *Greenhouse Bulbs*, as Sparaxis, Ixias, Bahianas, Ornithogalums, Lachenalias, and others, coming in flower, will require plenty of water and air; put them near the glass, in a cool part of the house.

Roses which have been kept dormant through the winter, prune neatly, and tie up such as require supports—begin to give them water more freely, as they show signs of growth; fumigate occasionally with tobacco, to keep down the fly; also propagate from cuttings any desirable varieties; repot of young seedlings in small pots to have them esstablished for turning out in the open ground at proper time.

As usual, keep all plants in a clean condition, by sponging and syringing over them; prune plants down so as to give them a proper shape, as a bushy plant, of any kind, looks far neater than when run up like those which we sometimes notice, that are quite naked below, which is for want of heading down in proper time. The time is not far off when specimen plants will be more appreciated for their growth, as well as for their flowers.

FENCES TO RESIST FRESHETS.

To the Editor of the American Farmer—

Sir:—During a late visit to Jaquelin Hall, the beautiful and hospitable mansion of Col. John J. Ambler, near Orange Court House, Va., I was struck with the plan which has been there adopted to construct cheap and permanent fences on low grounds which are subject to high freshes, which was new to me, and may be equally so to many of your readers.

On the embankment formed by the dirt which has been thrown out of an ordinary ditch three feet wide and two feet deep, willow twigs have been planted in line, about two feet apart; the trunks of the willow trees, which are now some two or three years old, serve as *stakes*, whilst the lateral limbs, furnishing an inexhaustible supply of material, have been interlaced so as to form a *wattle fence*, as ornamental as it is useful, and so firmly attached to the soil by the roots of the trees, that the heaviest floods pass over without injuring it. As low grounds are generally alluvial and rich, it requires a very short time for the willow cuttings to attain the size which will allow them to be used as stakes. AN OLD SUBSCRIBER.

Chesterfield County, Va. Dec. 20, 1851.

REVIEW OF THE TOBACCO & GRAIN MARKETS.

Reported for the American Farmer by J. W. & E. Reynolds.

The Tobacco market has been very quiet since our last monthly report, and nothing has occurred which may have a tendency to affect the price of the article hereafter. The French contract has been taken for this year, but it is said at low rates; what proportion of it will be supplied from the Maryland crop it is hard to say, for it seems of late years, that the Ohio crop has been substituted almost entirely for that order. We neither recommend our friends to keep back or to force their crops to market this spring, but to ship as it may suit their convenience. We quote common dark crop and second Tobacco at $3 to 3½; good crop $4 to 4½; good and fine red $5 to 7; extra fine $7½ to 9; ground leaf $4 to 7½, as per quality.

Grain—Wheat has declined from 3 to 4 cts. per bushel within the last week, and we now quote good red 93 to 96c; good and fair white 95c to $1; prime white for family flour $1.03 to 1.06. Corn, white 54 to 56; yellow 55 to 57c. Oats 33 to 36c. Rye 70 to 73c.

Flour—The published advices by the last steamer has had the effect of depressing the market for flour and grain; but if we take into consideration the general tone of the accounts from various quarters of Europe, we feel confident that the present decline is but temporary, and that the farmers of this country will, ere long, obtain a remunerating price for their produce—Although too early to form a decisive judgment of the coming wheat crop of this country, yet the appearances are generally not at all flattering. We quote Howard st. and City Mills $4.25—Rye Flour $3.75—Corn Meal $3.—The receipts and sales of flour during the last month have been unprecedentedly large.

Wool, 19 a 21c. for com. fleece, and 30 a 33c. for washed—*Whiskey*, 23 a 24½c. per gal. for bbls. or hhds.—*Wood* has declined, but the price is still good, and supply limited—Oak, $5 a 5.50, pine $4 a 4.50, and hickory, $6 a 7—*Plaster*, $3.37 a 3.50 per ton; ground $1.12 per bbl.—*Rice*, firmer, at $3.25 a 3.50 per 100 lbs.—*Naval Stores*, in demand; Spirits Turpentine 42 a 43c; com. Rosin $1.25; good to prime do. $2.50 a 3.75; Tar $1.62 a 1.75; Pitch $1.50 a 1.62—*Hay*, $14 a 15 for timothy—*Cotton*, by last advices, had declined in Liverpool ⅛d. per lb. since the preceding steamer—*Peas*, $1.75—*Beans* $1.50 per bush.—*Provisions* of all kinds firm—*Seeds*, Herds Grass $1 per bushel, Ky. Blue Grass $2.50, English or the Italian Rye Grass $3, Hard Fescue $3.50, Sheep Fescue $3.50, Crested Dog's Tail $5, sweet scented Vernal Grass 75c. per lb., White Clover 25c. per lb.—Clover Seed, $5.75 per bush., demand good and stock light; Flaxseed $1.16—*Hogs* $6.75 to $7.25—*Cattle*, $3.75 to $4.50 on the hoof, equal to $7.50 a 8.75 net, and averaging $4.12 gross.

Premium Chain Pumps.

THE Subscribers have now on hand, and are constantly manufacturing large quantities of Materials for CHAIN PUMPS, which they are prepared to sell at wholesale to Merchants and Pedlers. Also to put them up in wells at short notice, on the best terms, in any part of Delaware, Eastern Shore of Md., or Chester Co. Pa. A Pump put up in a well of 20 feet, all complete in running order, would cost but $13.

Our Pump took the Premium at the New Castle Co. Delaware Agricultural Fair, in October last.

On account of remarkable simplicity of construction these Pumps are very easily put up and kept running, not being liable to get out of order. They require less power to operate them than any other pump that raises the same quantity of water, and of course will raise more water with the same power.

They can be put in wells of any depth, though like all other machines for raising water, the less the depth the easier the work. A child 8 or 10 years old can draw water from wells of ordinary depth with ease and safety.

No other pumps produce so good an effect upon the quality of the water, for these agitate it from the top to the bottom, thus keeping it lively and fresh like spring water, which owes much of its sparkling character to a constant circulation.

Sand and gravel do not obstruct its action nor produce any important wear and tear.

On ceasing to turn the crank the water soon falls to a level with that in the well, and of course will not freeze, in this respect being decidedly superior to all other pumps. Besides being so well adapted to Domestic uses they are preferred wherever they have been used in TANNERIES, BRICKYARDS, BARNYARDS, and similar places. In short, for raising water, it is the best and most generally useful machine in the world.

ORDERS will be executed with the utmost promptness and dispatch for any quantity of chain alone, or for the cranks, wheels or tubing, or for all together, and on the very best terms. REYBOLD & HYDE.

DELAWARE CITY, DEL. mh 3t*

CHEMICAL MANURES.

Kettlewell's Agricultural Depot, Baltimore.

THE undersigned begs leave to remind the Agricultural community, that he is prepared to furnish them with his FERTILIZING SALTS, a chemical compound that experience has shown to be the best SPRING MANURE now offered to the public. His challenge to Guano as a Corn Manure still remains unaccepted. For a Corn or Grass crop he is willing to test his "RENOVATOR" with any Manure known to the age. The experience of our most enterprising agriculturists bear this testimony in abundant certificates, which he will cheerfully forward to any one who wishes to try the experiment, or who desire information upon so interesting a subject.

His BIPHOSPHATES—pure bone-dust dissolved in sulphuric acid—is one of the most prompt and durable Manures known to the age.

His Mixture of "POTASH AND PLASTER" has met with universal favor, supplying the soil with these two valuable elements, almost indispensable to a corn crop. His "GROUND PLASTER" has been so generally approved, that he only feels it necessary to repeat that it shall never fall below the standard he has adopted. All applications for pamphlets will be promptly responded to, with certificates from names that will command respect, and rebuke any intimation of either "humbug or imposition." Direct to John Kettlewell, free of postage expense.

JOHN KETTLEWELL,

Office corner of Lombard and Hanover streets.

mh. 1 Factory, Federal Hill.

Netting—(Machine made.)

THE subscriber will keep constantly on hand a very superior article in the quality of the Twine, regularity of the Meshes, and perfection of the Knots, ready to be furnished to order for Fishing Nets and Seines, and the protection of Fruit Trees, Tobacco Plants and Garden Vegetables from frosts; and Fruit and Berries from birds, and will be sold much lower than it can be made by hand. Apply to

JOHN McMULLEN,

mh. 1-3t* 71 South st. Bowly's wharf, Baltimore.

GUANO—GUANO.

500 TONS PERUVIAN GUANO, direct importation, and *warranted equal in quality* to any in the market. The Guano is put up in good strong bags, and is in fine shipping order. For sale in lots to suit purchasers, at the lowest market rates, by

WM. ROBINSON, No. 4 Hollingsworth st. near Pratt st. wharf, Baltimore, Md.

Also, PATAGONIA GUANO, BONE DUST, Building and Agricultural LIME, for sale on the best terms. je. 1-tf

J. T. WATKINS,

FEATHER BEDS,

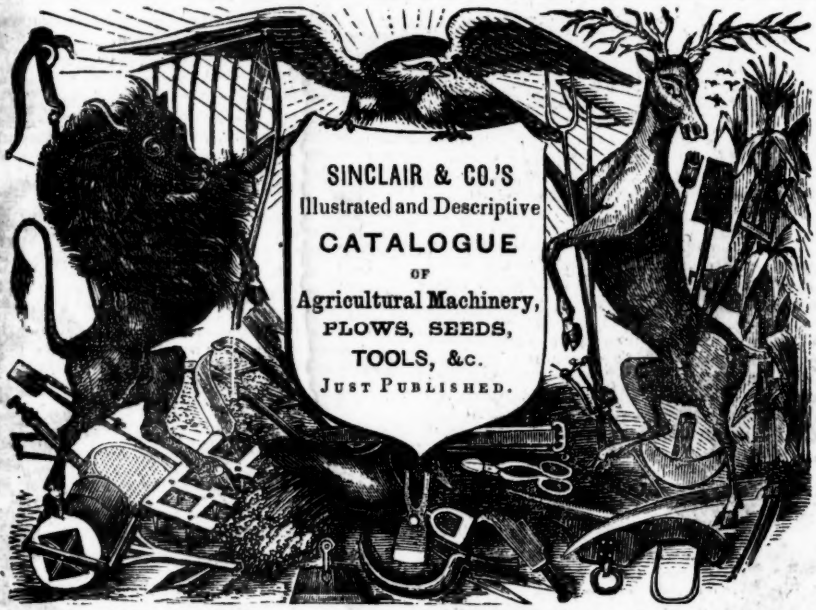
CURL-HAIR MATTRESSES,

FURNITURE AND VARIETY STORE, &c.

No. 47 South street,

Between Lombard and Pratt street,

Ap. 1-1yr *BALTIMORE.*



JUST PUBLISHED,

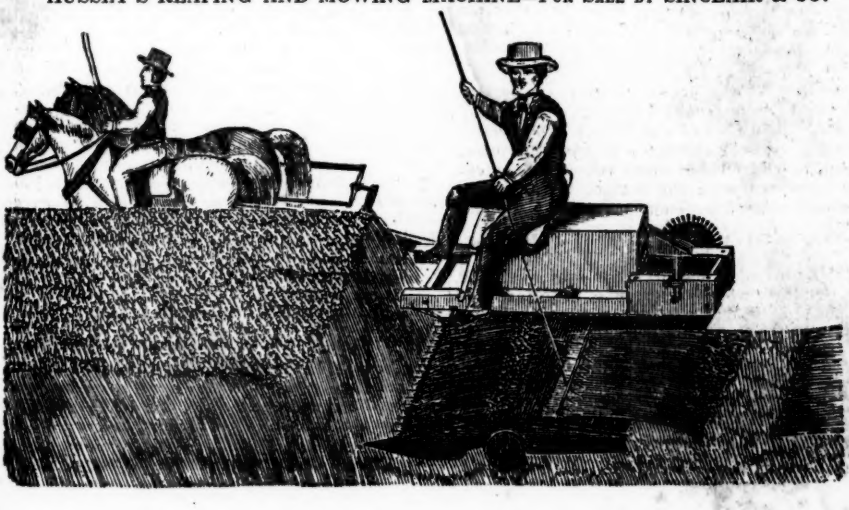
SINCLAIR & Co.'s ILLUSTRATED AND DESCRIPTIVE CATALOGUE FOR 1852,

CONTAINING more than 150 ENGRAVINGS illustrating Agricultural machinery of almost every kind required on a Farm or Plantation, with Designs of Machine Houses, Barns, &c., Notes and Directions for gearing and arranging Machinery on the most economical and judicious plan; also showing figures and description of the most approved American PLOWS, (including the *Md. Self-Sharpening*, *Patuxent* and *Echelon Plows*,) Harrows and Cultivating Implements, Field and Garden Tools, together with a list of American and European GARDEN and FIELD SEEDS, including brief directions relative to time of planting and sowing, quantity required to seed an acre, &c.; also a synopsis of Wm. Corse's Catalogue of *Fruit and Ornamental Trees*, with Directions for Planting, and the Management of Orchards.

Subscribers to the American Farmer enclosing a stamp, by mail, will be furnished with a copy gratis. Address,

R. SINCLAIR, Jr. & Co.
mh 1 Manufacturers and Seedsmen, Balto.

HUSSEY'S REAPING AND MOWING MACHINE—For Sale by SINCLAIR & CO.



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OLD ESTABLISHED

SOUTHERN AGRICULTURAL Implement Works

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SEED HOUSE,

No. 58, 60 and 62 LIGHT STREET,

BALTIMORE.

THE experience of thirty years relative to the proper construction of Implements and Machinery for the use of SOUTHERN FARMERS and PLANTERS, affords us an advantage that time and experience alone can give, and for the interest of our customers as well as our own, we solicit a continuance of their patronage, which will always command our most careful consideration, and by our having the advantages alluded to, insure them against possessing a stock of Implements of light and inferior construction, and, as regards the South, of doubtful utility. We offer for sale the following synopsis of our stock of

IMPLEMENTS AND SEEDS,

and refer to our Illustrated Catalogue, (just published) for particulars, viz:

PLOWS.

Of PLOWS, we have in our collection the largest assortment to be found in this or any other country, including the

MARYLAND SELF-SHARPENING,

with a Mould Board of unrivalled form, made suitable for the roughest lands and to economise labor; also the Sinclair & Moore and Patuxent pattern, for clay and light loam; the Echelon, with 2 and 3 mould boards set regular for seeding and cultivation; several excellent Eastern and Western patterns; Subsoil, Hill Side Plows, &c.

ROLLERS, HARROWS, CULTIVATORS, Grain and Hay Rakes, Ox Yokes; Grub and Bush Hooks, Churns, Post Hole Augers, Scythes and Snaths, Plow Harness, Screw Wrenches, Hay and Manure Forks, Straw and Hay Knives, Grubbing and Weeding Hoes, Ox, Trace and Halter Chains, Shovels, and Farming Tools generally.

WHEAT, CORN AND SEED DRILLS.

The entire success of our Patent Wheat Drill last season, and the increased demand for them, has induced us to manufacture this article extensively for the approaching season. Price $90.—The Corn and Seed Drill made on same plan, $20.

CORN AND COB CRUSHERS.

Of these we make several kinds—price $25, 30 and $35. For plantation use, those at $30 are preferable and excellent in every particular.

HUSSEY'S REAPING AND MOWING MACHINES.

Without regard to the unrivalled success of Hussey's Reaper at the late London Exhibition, we have determined to add them to our stock of Implements. Their simplicity and strength of construction and manifest perfection of operation, must result in their general adoption.

CORN-SHELLERS.

The Improved Single and Double Spout (price $10 a 16) are our best hand power machines; and the Cylindrical at $30, for large crops. Several other patterns are made at $16 a 80.

STRAW AND FODDER CUTTERS.

The Two Knife, or Cylindrical, rates first in value; of these we make 4 sizes, at $25 to 45.—Green's Double Cylinder Hay and Straw Cutters—price $10 to 30. Common sorts, $5 to 12.

DOMESTIC CORN MILL.

Preferred size for plantation use, is the 30 inch Cologne and French Burr Stone—price $110 a 135. Iron Plate or Negro Hominy Mills, $9 a 10.

HORSE POWERS.

Sweep and Railway, of various sizes, for 1 to 12 horses—price $75 to 135.

THRASHING MACHINES.

Made with open Wrought Iron Cylinders—most excellent and effectual—price $35 to 60.

WHEAT FANS,

With Seperating Fixtures, and warranted equal in efficiency to any in this market—price $25, 30 a 35.

PLOW AND MACHINE CASTINGS,

Of all the various sorts suitable for Plows or Machinery—prices reduced.

GARDEN AND FIELD SEEDS.

Our stock of Garden Seeds are principally from the Clairmont Gardens, grown under our immediate supervision—such as we find necessary to import, are obtained from seed establishments in the South of Europe, where they become quite as well matured as those raised in this latitude. The following prominent kinds, or a synopsis of our stock of Seeds, are in store and for sale, viz: Mangle Wurtzel; Large Red and Yellow Globe Rutabaga; Hybrid and Large White Table Turnip; White Sugar and Blood Beet, *extra fine;* Large White Field and Table Carrot, superior; Large Heading, Savoy and Early Cabbage Seeds; Early Corn, Cucumber, Lettuce, *early and late;* Melons, Onion Seed, Parsnip, Early and Late Peas, *several new sorts;* Early and Late Potatoes, Radish Seed, Squash, Tomato, Herb Seeds; Flower Seeds, 300 *fine sorts.* Also, American Grass Seeds, *of every description*—Lucerne, Vetches or Tares, English Rye Grass, Sweet Scented Vernal Grass, English and American LAWN GRASS SEED, Hard and Sheep Fescue Grass, Crested Dog's Tail, &c.

FRUIT AND ORNAMENTAL TREES AND PLANTS.

Orders will be received for the Clairmont Nurseries, now conducted by Wm. Corse, whose assortment of Fruit and Ornamental Trees, Plants, &c. is extensive, carefully grown and orders put up with care.

March 1

$50,000 AGRICULTURAL IMPLEMENTS!!

Were Exhibited at the MARYLAND and PENNSYLVANIA STATE FAIRS, held in October, 1851. These Fairs being open to competitors from all parts of the world, brought together the largest display of Farm Implements ever witnessed in this country, among which were to be seen Implements from all parts of the United States. After several days strict examination, the following awards were made, viz: by

The Maryland State Agricultural Society

To E. Whitman & Co.

Certificates of Premiums for their WROUGHT IRON RAILWAY HORSE POWER and Bamborough Wheat Fan, being the Society's HIGHEST honors, they having taken the First Premiums THREE successive years,

For the Largest and Best Display of Useful and Valuable Agricultural Implements,	$30
For the Best Portable Hay Press,	25
" " Farm Wagon and Harness,	13
" " Cart and Cart Gear,	9
" " Portable Smith's Forge,	6
" " Corn and Cob Crusher,	5
" " Butter Churn,	4
" " Corn Sheller,	4
" " Plow,	5
" " Hydraulic Ram,	3
" " Chain Pump,	2
" " Hogs Trough,	3
" Drain Tile,	2
For Premiums in Ploughing Match,	14

The Pennsylvania State Agricultural Society, at Harrisburg, awarded to E. Whitman & Co. the following Premiums, viz:

For the Best Portable Hay Press,	$20
" " Sweep Horse Power,	10
" " Reaping Machine,	10
" Largest and Best Display of Useful and Valuable Agricultural Implements,	20

The Maryland Institute, in 1851, awarded to E. Whitman & Co. for their Iron Cylinder Thresher and Wheat Fan, a heavy Silver Medal.

The above result shows conclusively, that their implements are regarded as being the best and most valuable, the amount in premiums being three times as much as any other Exhibitor of Implements. mh. 1

REAPING MACHINES.—McCormick's Prize Reapers at the World's Fair, for sale by
mh. 1 E. WHITMAN & CO., Balto. Md.

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250 WHITMAN'S IMPROVED WROUGHT IRON RAILWAY HORSEPOWERS, for sale only by E. WHITMAN & CO.
mh. 1 Corner Light and Pratt streets, Balto.

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300 WHITMAN' PREMIUM IRON CYLINDER THRESHERS, for sale by
mh. 1 E. WHITMAN & CO. Balto. Md.

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100 SWEEP HORSEPOWERS, most approved patterns, for sale by
mh. 1 E. WHITMAN & CO. Balto. Md.

1000 BAMBOROUGH'S CELEBRATED 51 PREMIUM WHEAT FANS—for sale by E. WHITMAN & CO.
mh. 1 Baltimore, Md.

THE PRIZE PLOUGHS at the World's Fair, for sale by E. WHITMAN & CO.
mh. 1 Sole Agents for State of Md.

FIELD SEEDS.

RED and White Clover, Timothy, Lucerne, Orchard, Herds and Rye Grass, for sale by E. WHITMAN & CO.
mh. 1 Corner Light and Pratt sts., Balto.

FERTILIZERS.

GUANO, BONE-DUST, LIME and PLASTER, for sale by E. WHITMAN & CO.
mh. 1 55 Light street, Baltimore, Md.

GARDEN SEEDS.

A LARGE STOCK of Fresh and Genuine GARDEN SEEDS, raised expressly for E. WHITMAN & CO.
mh. 1 Cor. Light and Pratt sts., Balto. Md.

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500 CULTIVATORS,
500 HARROWS,
450 STRAW CUTTERS,
400 CORN SHELLERS,
PREMIUM HAY PRESSES,
CHAIN PUMPS, for sale by
mh. 1 E. WHITMAN & CO.

PIGS FOR SALE.

THE subscriber having several Chester and White Delaware Sows in pig by the 1st Premium Boar Emperor, and by the 2nd Premium Boar Jack, (purchased at last Show, to enable him to cross his stock of hogs,) will be able to furnish by the middle of April, Pigs from the different crosses, thus enabling Farmers to supply themselves with breeding stock, that will not degenerate, as too often happens when a pair of Pigs from the same litter are procured.

Price, Fifteen Dollars per pair, or Ten Dollars for a single Pig—delivered at six weeks old, any place in Baltimore. Apply to SAMUEL SANDS, Editor, or

G. Y. WORTHINGTON,
Mar. 1-2t Elkridge Landing, Howard Co. Md.

AGRICULTURAL.

THE subscriber has located at No. 40 Second Street, Baltimore, second door east of the Town Clock, where he offers for sale the best Guano, Potash, Soda, and other Agricultural Salts that may arrive in this port, in quantities to suit the purchaser, at the lowest market prices.

From a practical knowledge obtained during the last 26 years, he feels himself qualified to give practical information (which cannot be obtained from the theoretical chemist or merchant,) as to the application of the Salts to the different soils, which depends on many circumstances and causes.—There are as many diseases in the soil, as are found in the human system.

The subscriber will visit any part of this or the adjoining states, for the purpose of examining and giving his opinion and directions for the improvement of the different soils. No opinion of the treatment of soils can be given, upon a simple analysis of the soil;—it requires a personal examination of the soil and its climate, and without which the simple analysis is not worth the paper on which it is written. WM. BAER,

mh. 1 Agricultural Chemist.

4000 TONS PERUVIAN GOVERNMENT GUANO on hand, and to arrive.—500 tons PATAGONIAN—for sale by S. FENBY & BRO.

Corner of Gay and Pratt streets, Baltimore.

S. Fenby & Bro. are now prepared to make contracts for further delivery for Fall seeding, and having arranged for their supply of Guano arriving early in the season, purchasers can rely on not being disappointed. A large amount of Guano intended for the Fall crop will not arrive in the United States until late in the autumn. jy-1.

Horner's Prepared Animal Manure.

THE subscriber asks the attention of the farming community to the following analysis by Dr. Jas. Higgins, State Chemist, and comparison between his prepared Animal Manure, and Patagonian and Peruvian Guano. It is necessary for a full understanding of the comparison, to state, that his Compound costs but 35 cts. per bushel, *or* $12 per ton.—This preparation has been used with much success on the tobacco crop, and testimonials from Mr. Reynolds, Mr. R. H. Hare, Col. Bowie, and other well known planters and farmers, who have purchased it for Corn, Wheat, Tobacco, and spring crops generally, can be produced as to its efficiency, by practical tests.

For further particulars, see advertisement in another part of this paper. dec. 1-6t* JOSHUA HORNER.

LEONARDTOWN, Oct. 7th, 1851.

To Mr. J. HORNER, Baltimore—*Dear Sir*:—Below I send you a statement of your Manure as to its essential valuable constituents, and the relation which it bears to Patagonian Guano. A ton of your manure contains of

Ammonia,	54 34-100 pounds
Phosphate of Lime,	528 do

The average of Patagonian Guano by the ton, as it is sold, contains of

Ammonia,	60 pounds
Phosphate of Lime,	800 do

Estimating Patagonian Guano and your Manure by the same rule as to the value of the several constituents, the Patagonian Guano would be worth $19.20 per ton, and your Manure $14.44. If Patagonian, therefore, be worth $38 per ton, your Manure is worth about $28.50 per ton.

THE VALUE OF PATAGONIAN GUANO AND YOUR MANURE, I DETERMINE BY THE AGGREGATE VALUE OF THEIR SEVERAL VALUABLE CONSTITUENTS, and *by the same rule* which would make Peruvian Guano worth $46 per ton. Your Manure also contains 122 pounds of Gypsum, 114 pounds of Salts of Potash and Soda, and 300 pounds of Lime to the ton, being about equal to Patagonian Guano, of average quality, in these constituents. Very truly yours, &c.,

JAMES HIGGINS, St. Ag. Chemist.

P. S.—You can make what use you please of this.

AGRICULTURAL IMPLEMENTS.—LABOR SAVING MACHINERY.—*GEORGE PAGE, & CO.* Machinists and Manufacturers, Baltimore st. West of Schroeder st. Baltimore, are now prepared to supply Agriculturists and all others in want of Agricultural and Labor-saving MACHINERY, with any thing in their line. They can furnish Portable Saw Mills to go by steam, horse or water power; Lumber Wheels; Horse Powers of various sizes, ranging in price from $85 to $190, and each simple, strong and powerful. Their *Horse Power and Thrashing Machine*, they are prepared to supply at the low price of $125 complete; the Thrashing Machines without the horse power, according to size, at $30, 40, 65 and $75; Improved Seed and Corn Planters; Portable Tobacco Presses; Portable Grist Mills complete, $165.

1000 AGENTS WANTED.

HEADLEY'S LIFE OF KOSSUTH.

JUST PUBLISHED,

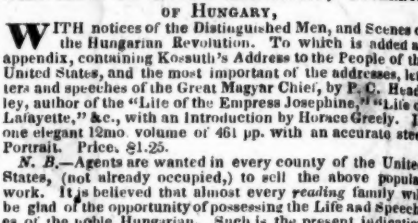
THE LIFE OF LOUIS KOSSUTH, GOVERNOR OF HUNGARY,

WITH notices of the Distinguished Men, and Scenes of the Hungarian Revolution. To which is added an appendix, containing Kossuth's Address to the People of the United States, and the most important of the addresses, letters and speeches of the Great Magyar Chief, by P. C. Headley, author of the "Life of the Empress Josephine," "Life of Lafayette," &c., with an Introduction by Horace Greely. In one elegant 12mo. volume of 461 pp. with an accurate steel Portrait. Price, $1.25.

N. B.—Agents are wanted in every county of the United States, (not already occupied,) to sell the above popular work. It is believed that almost every *reading* family will be glad of the opportunity of possessing the Life and Speeches of the noble Hungarian. Such is the present indication from the unparalleled sale of the work.

Address DERBY & MILLER, Auburn, N. Y.

A single copy sent by mail, *free of postage*, on receipt of the price, post paid. Mar. 1-1t.



Maryland Agricultural Warehouse and SEED STORE—Wholesale and Retail.

F. B. DIDIER & BRO.

No. 97 N. PACA ST., NEAR FRANKLIN, BALTIMORE.

WE have now in store and ready for sale, one of the largest and best assorted stock of AGRICULTURAL MACHINERY, FRUIT and ORNAMENTAL TREES, SEEDS, FERTILIZERS, &c. ever offered in this market, the same gotten up expressly for the spring trade—to which we would most respectfully invite the attention of our friends and the public generally.

N. B. Dr. X. Bulleno's invaluable extract, guaranteed to cure the many afflictions to which man and beast are heir to, or no charge made.

mh. 1 F. B. DIDIER & BRO.

Bone Dust.

THE subscriber will furnish ground Bones, warranted free from every mixture, *or the entire quantity forfeited*, at 50 cents per bushel, delivered at his factory. Also a second quality article, composed in part of Bones, and in part of Flesh of Animals, being a quick and powerful fertilizer, at 35 cents per bushel.—Col. W. W. W. Bowie, the well known "Patuxent Planter," who receives his supply of bones from my Factory, says that the "bone dust at 50 cents per bushel, was the best I ever saw." He has lately made such an improvement in his machinery for crushing bones, as to enable him to sell an article better than ever before offered, a sample of which can be seen at the office of the American Farmer.

None of my manufactured Bone Dust is sold, except at my Factory. JOSHUA HORNER.

I furnish to my customers, when bags are not sent, 2 bushel bags, at 6 1-4 cents each.

Reference.—Messrs. Randolph, Gollbart & Co., 158 Thames street. Mar. 1-6t*

PIGS FOR SALE—3 pairs Pigs, half Chester and half China, (an excellent cross)—will be delivered in March—Price $1 per pair, delivered in the city—$1 for cage and feed if sent away.

Also, a very superior full bred Chester BOAR, 17 mos. old, out of animals which have taken first prizes at the Md. State Agr. Soc. Cattle Show. Price $50. Apply to C. WARNS, Elkridge Landing, Howard Co. Md. or to S. Sands, office American Farmer. mh 1-1t*

LIME.

THE subscribers are prepared to furnish Building and Agricultural Lime at the depot on the Back Basin, corner of Eden and Lancaster-sts., which they will warrant to give satisfaction, it being burnt from pure Alum Lime Stone, equal to any found in the United States. Orders may be left with WILLIAM ROBINSON, No. 15 Hollingsworth-street, near Pratt.

tf FELL & ROBINSON, City Block.

Important to Farmers and Machine Makers.

THE subscriber respectfully informs the public that he has lately completed a TRIPLE REACTING INTERNAL GEARED HORSE POWER, which outrivals any in use.—It is made entirely of Iron, both Frame and Gearing. The Journals are made of Cast-Steel—its weight is 600 lbs. On trial it has proved itself capable of performing from 50 to 100 per cent. more work than other Powers with the same labor of the team. It is warranted to hold 8 horses.

I have also completed a combined THRESHER AND CLEANER, which is capable of Threshing and Cleaning from 300 to 500 bushels of wheat per day, with from 6 to 8 Horses and an equal number of hands.—4 horses can thresh with it from 100 to 200 bushels per day of wheat, and 400 to 500 of oats. It is very convenient for those who follow Threshing, and for two or more farmers to own in company, it is more convenient to move than any machine in use. The Machine stands on the wagon while threshing—the Power is loaded on the same wagon in moving—two horses are sufficient to move it; it will save enough labor in threshing 2000 bushels to pay its extra cost. It will thresh in a mow or by a stack as conveniently as in a barn. The cylinder and concave can readily be adjusted so as to thresh with equal facility both tough and dry grain.—it is free from the complication and liability to get out of order of other machines of the kind, and of less cost.

Machine makers supplied on the most reasonable terms. Powers made by wholesale by I. W. Groff, Lancaster, Pa.—Threshers, Machines, &c. made and for sale by Jeffrey Amedley, Columbia, Pa.

All orders directed to the subscriber at Lancaster, Pa., will be promptly attended to. SAMUEL PELTON, Jr.

Also for sale by E. Whitman, Jr. & Co., Baltimore. jy.1-1y

Hussey's Reaping and Mowing Machine.

THE SUBSCRIBER will continue to manufacture his Machines as usual in Baltimore. Important improvements will be added this year. Its universal high character in this country has been confirmed by its late triumphant success in England.

The following is from the London Times, of Oct. 7th.

"A trial has taken place before the Cleveland Agricultural Society, of the respective merits of M'Cormick's and Hussey's American Reaping Machines, and the report of the Jury of practical men, appointed by the consent of both parties to decide the question of merit, is favorable to the latter Implement. This *decision throws considerable doubt upon the justice of the award of a Great Medal, at the Exhibition to M'Cormick's.*"

The Jury at Cleveland unanimously decided that Hussey's Machine cut the corn in the best manner, especially in the direction of the lean—that it caused the least waste—that it did the most work in a given time—that it left the cut corn in the best order for gathering and binding—that it was best adapted to ridge and furrow, and was the least liable to get out of order. It was subsequently tried at Windsor, in presence of Prince Albert, who ordered two machines, one for Windsor and one for Isle of Wight, a strong commentary on the premature award of the great medal by an Institution of which he was the head.

The following is Prince Albert's certificate.

WINDSOR CASTLE, Nov. 13, 1851.

Sir:—In answer to your letter addressed to Gen. Wemyss, I have received the commands of his Royal Highness Prince Albert, to say, that so far as he could judge of Mr. Hussey's Reaping Machine, from its performance in the high fern at Windsor Park, his Royal Highness is disposed to form a very favourable opinion of it, and has ordered one* in consequence for the use of his own farm. His Royal Highness can however give no opinion as to the relative merits of this machine in comparison with those of others which he has not seen at work. I have the honor to be sir, your ob't serv't,

GREY.

*The Prince ordered two Machines, one for Windsor and one for Isle of Wight.

The following is the language of one of the Jury who gave the Medal to M'Cormick. An English paper says—At the table at Barnard Castle, Mr. Thompson proposed the health of Mr. Hussey with great fervour, and spoke of the great disadvantages under which Mr. Hussey's Machine had labored when tried against M'Cormick's for the great exhibition Medal; Mr. Hussey not being in the country at that time, and no one being present who understood the adjusting and working of the implement. Mr. Thompson said he was now so thoroughly satisfied of its great merit, that he would do his best to get a medal for it.

Price of Mowing and Reaping Machines,	$125
Price of Reaping Machine,	115
Price of Front Wheels,	20
Platforms for side delivery,	5

feb. 1-tf.

FOR SALE—A FARM of 300 acres, 70 of which is woodland, situated in Talbot county, on Third Haven River, and opposite to the Military Academy at Oxford, being about 5 miles from Easton. The steamboats plying between Baltimore and Easton pass the door.

Few Farms have ever been offered for sale possessing advantages equal to those belonging to this estate. It is now in a good state of cultivation, and such are the inexhaustible resources of the most fertilizing manures, that with comparative small expense of labor it may be made one of the most productive farms of the size in the county. Among the manures which exist so abundantly, there is Marl, Shell Bank, Marsh and Woods' Dirt.

Game, such as frequent these waters at all times during the season. Also from the River, Fish, Oysters, &c. in abundance.

The society of the neighbohood is everything that a gentleman could wish for his family, being in the immediate vicinity of the estates of Col. Nich. Goldsborough, Gen. Tench Tilghman and the Messrs. Bannings.

The DWELLING is a spacious double house, one of the finest in the county, built by one of the best Baltimore mechanics, and combines all the conveniences for a large family. A very exceellent tenant House, which in case of a division of the farm into two, of which the place is very susceptible, would answer for a dwelling. Barn, Stables, Carriage Houses, Granaries, &c. &c.

Martin Goldsborough, Esq., who now occupies the premises, will give information to any who may call to see it. The place will be shown to any one by Mr. John Dulin, my present overseer, who resides on the premises; and for further particulars, enquire of

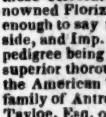
GEO. W. MORLING,
mh 1 No. 259 Baltimore-st., Baltimore, Md.

C. H. DRURY, *Hollingsworth street corner of Pratt—Head of the Basin*—having completed his establishment with Foundry connected, for the making his own Castings, is prepared to furnish all varieties of *AGRICULTURAL IMPLEMENTS* and *CASTINGS*, made to pattern of the best material.

The following is a list of PLOWS kept constantly on hand: Davis, of the different numbers, for wrought and cast shears, S. & M., Chenoweth, Wiley, 2 and 3 furrow, No. 0, Hill side, No. 1 and 3 Connecticut—Beach Improved or Posey Plow, with common Davis cast shear—Self-sharpener or wrought shear—Corn Cultivators, plain and expanding—Tobacco do.—Wheat Fans—Corn shellers with double hopper—Old Vertical and Virginia sheller—Harrows—superior Pennsylvania made Grain Cradles—Revolving Horse Rakes—Cylindrical straw Cutters, &c. &c. Horse Power *GRIST MILLS*, a very useful and saving article, and coming into general use. *HORSE POWER AND THRESHING MACHINES*, of these I need not say any thing, as wherever they have been in use any time, they are preferred to all others.

C. H. D. will this year make a smaller size Power & Thresher, (price of Power, $100, Thresher, $50, Band, $10, or when taken together, complete, $150 cash.) Persons in want of Implements made of the best material, and put together in the strongest and best manner to answer the purpose for which they are intended, are invited to call on the subscriber. jel

The Thorough Bred Stallion "Beverly" For Sale.



HE is a fine brown bay, five years old next spring, full sixteen hands high, of fine points and form for action and durability; he was the premium three years old colt at the Maryland State Fair for 1850, (Baltimore.)

PEDIGREE.

His sire Antrobus by Imported Priam, out of Aurora; his dam Ellen Hooe, by Imported Margrave, out of Lady Culpeper by Carolinian, (son of Sir Archy) out of a full sister of those celebrated horses Defiance and Revenge, by the renowned Florizel, one of the best sons of Diomed. As it is enough to say that Beverly is from Imp. Priam, on his sire's side, and Imp. Margrave on the dam side, the residue of his pedigree being unquestionable, persons wishing to buy a very superior thorough bred Stallion, are referred to the vols. of the American Turf Register for the pedigree, ancestry and family of Antrobus' dam "Aurora," (of the stud of Wm. H. Tayloe, Esq. of Mount Airy, Virginia,) and for that of Lady Culpeper, the dam of Ellen Horr; and they will be satisfied that Beverly combines in his pedigree, and the performances of his family, as much promise for size, strength, action and durability, as any young stallion in the Union. Owning his dam, and others very near akin to him, I will take six hundred dollars for him, and avoid the too much "breeding in and in"

H. G. S. KEY.

Piedmont Town, Md., Dec. 10th, 1851. jan.1

2000 Acres of Roanoke Land For Sale.

THE subscriber having a much larger quantity of land than he can cultivate, and wishing to have some neighbors who may be disposed, like himself, towards agricultural improvement, would sell upon advantageous terms, from 1 to 2000 acres of the well known land of Roanoke River. This quantity would make two good plantations, and might be so divided. To those who may not be acquainted with Roanoke lands, they may be described as being very similar to the *best* lands of the Upper James river—they consist, 1st, of fine chocolate colored "low grounds," admirably adapted for wheat, corn and clover, lie immediately on the River, and are from ¼ to 3-4 of a mile wide. These low grounds are all of pure alluvial soil for several *feet deep*, and are as near being inexhaustible as any lands can be. In rear of these are the "second low grounds" lands, very similar in color and general characteristics, but not so rich in alluvial deposite—they are equal to any lands in the U. States for wheat, clover and the grasses, 31 1-4 bushels per acre were measured on 100 acres after a loose gathering; they are also well suited for Cotton, 12 and 1500 lbs. per acre having been made on lands adjacent and every way similar to those of the subscriber, (who does not cultivate cotton.) The natural growth of these lands is composed of the Black Walnut, Tulip, Hickory, Ash, Oak, &c. Still further from the river, lie the "Uplands,"—these are greatly inferior to the low grounds, but produce corn and cotton well, and possessing a fine clay subsoil, when limed produce wheat and the grasses to advantage—their timber growth is Oak, Hickory, Dogwood, &c. The lands run up to within about 7 miles of the point where the Petersburg Railroad and the Norfolk Railroad cross each other; both are laid with heavy T iron, and afford a choice of markets. The river affords a navigation for 8 months of the year, and the subscriber has loaded a sea-going vessel with 6600 bushels of corn in one cargo.

A large portion of the land has been improved by Lime, Clover and Plaster.

There is a new Dwelling House with 8 rooms, new kitchen, new brick smoke house, 40 feet by 20, and a number of frame negro houses. Also, a very extensive Water Power, with a Mill 64x30 ft. running 2 sets of mill stones, a Wheat Thrasher, Chaffing Fan, Elevator, and all the requisite machinery for cleaning wheat; Corn and Cob Crusher, &c. Saw Mill, both circular and up and down saw, &c.

The fall diseases, which formerly so greatly injured the value of lands in this region of country, have for the past ten years almost *wholly* disappeared, and its healthfulness can now be fairly compared with any portion of the U. States, inflammatory diseases being almost unknown.

The price of the land is $12 per acre for the entire tract, with a payment of one-fourth in cash, the remainder in 2, 4, 6 and 8 years, if the security is satisfactory, with interest.—These lands are well known to Mr. Solon Robinson, a well known agriculturist, and to Mr. Obed Hussey of Baltimore—they will be shown by visiting the subscriber in the town of Jackson, N. C., 9 miles south of Garysburg, on the Petersburg and Roanoke Railroad. Apply also to Samuel Sands, Esq., Editor of the American Farmer, or by letter, to

feb. 1-tf H. K BURGWYN, Jackson, N. C.

Sandy Point For Sale at Auction.

THE undersigned, prevented by engagements requiring his undivided attention elsewhere, from residing on his farm, will sell publicly, (unless previously sold privately, of which due notice will be given) at the Bollingbrook Hotel, in Petersburg, (Va.) on WEDNESDAY, the 26th day of May next, at 11 o'clk A. M., without reserve or regard to weather, that valuable, highly improved, and heavily timbered estate, known as Sandy Point, situated on James River, in the county of Charles City, Virginia, 45 miles below the city of Richmond, and 32 below the city of Petersburg.

This fine body of land contains 4,453 acres, and has been advantageously divided into four well-located farms, with dwellings, commodious barns, &c., and into five valuable lots of timbered land exclusive of an ample allotment of wood and timber for each farm.

Persons desirous of investing in lands of a quality not often in market, are invited to examine this estate.

Printed bills, giving the quantities in the subdivisions, &c. will be furnished, and accurate plats exhibited to applicants.

Possession given of the timbered lands immediately after sale, of the farms, at the end of the year, with the privilege of fallowing and seeding wheat.

Terms: One-fifth cash; balance in five annual instalments for the farms. For the timbered lands one-third cash and three annual instalments; credit payments to bear interest and to be secured by deeds and approved endorsed negotiable notes or bonds. R. B. BOLLING.

Petersburg, Va. feb1-ts. PANNILL & SONS. Aucts.

A Farm For Sale.

WILL positively be sold if immediately applied for, one of the very best FARMS in Baltimore county. It contains 278 acres, 50 of which are in wood, the balance in arable land. There is an apple orchard of 300 trees in full bearing, and is considered the best orchard in the county. Also, a large peach orchard of the choicest fruit in full bearing, as well as cherries, pears and quinces. A large part of the land is set in clover and timothy. The land is of the very best quality, and the yield of the Farm has never been surpassed by any in the neighborhood. It is situated near the Frederick Turnpike, 7 miles from Baltimore, and 1¼ miles from Catonsville, with fine society, churches, and schools, and adjoins the farms of John Glenn, G. W. Lurman, George Reinicker and Edw'd T. Elliott, Esqrs. The improvements are a very pretty and substantial STONE DWELLING HOUSE, 40 by 38 feet, with vestibule front, and a back building 30 feet, in which are kitchen and pantries. There are four rooms on a floor in the main building, besides the passages The house is quite new, having just been finished, and has been much admired; it is built in the Gothic style, and is of the very best finish. Also, a large new Barn and Stabling, just finished, 60 by 60 feet, and very complete; a good large two story frame house for Manager, and a good out house for hands. Those wishing to purchase will please call on the undersigned, who will take pleasure in showing the Farm. Terms will be made accommodating. Apply to me on the Farm; or, if by letter, post-paid and directed to CATONSVILLE, Baltimore Co. Md.

jan. 1 FRANCIS S. KEY.

National Agricultural Warehouse,

Washington City.

THE undersigned is pleased to inform the Farming community that he has completed the arrangements of his new and extensive warehouse on Seventh street, a few doors north of Pennsylvania avenue, and has now on hand and will continue to keep an assortment of *Agricultural* and *Horticultural* MACHINERY and IMPLEMENTS, together with Field and Garden SEEDS of every variety, as complete and well selected as can be found in any similar establishment in the United States.

His arrangements with the best manufacturers known in the country are such as will enable him to sell at their prices, and all goods leaving his warehouse will be warranted to prove as represented.

He invites particular attention to his assortment of Plows, Cultivators and Harrows—among which may be found a variety of new patterns, peculiarly adapted to the wants of our farmers. Descriptive catalogues furnished upon application.

FITZHUGH COYLE,
feb. 1-2t 7th street, Washington City.

PERUVIAN GUANO.—The subscriber offers for sale five hundred tons Peruvian GUANO, of very superior quality, and warranted equal to any ever imported. This Guano is put up in heavy and well secured Osnaburg bags, which to the farmer is an important consideration.

Agricultural Clubs and individual purchasers will be supplied upon as favorable terms as can be offered by any dealer in the United States. FITZHUGH COYLE,

National Agricultural Warehouse,
feb. 1-3t Seventh street, Washington City.

Chappell's Fertilizer.

HAVING purchased the Factory know as "CHAPPELL'S SOUTH BALTIMORE CHEMICAL WORKS," and having on hand a large stock of crude materials for the manufacture of the above celebrated Renovator of poor or worn out lands, the undersigned is now prepared to sell the same, made in the most approved manner and of superior quality, in quantities to suit purchasers, at the usual place, No. 158 LOMBARD ST., between Hanover and Charles. Price $3 per barrel, warranted to contain 300 pounds. Terms, cash under $50, or 6 mos. for town acceptances on sums over $50. For certificates of the valuable effects of this Chemical Salts, I would refer to previous numbers of the "Farmer."

feb. 1 JOHN G. CHAPPELL.

Marks' Daguerrean Gallery,

No. 159 BALTIMORE STREET, over Parr & Banks' China Store, and opposite Butcher's Confectionary,

WHERE the experience of years and the highest honors by the *Premiums* awarded to it by the *Maryland Institute* for successive years, confirm its superiority. All Pictures taken at this establishment warranted correct likenesses or you are not required to take them, and that at prices satisfactory. Particular attention paid to family groups and children. Views of Farms, Horses, Cattle, &c. taken at reasonable charges. Call at the Gallery and look at the specimens for yourselves.

feb. 1-1yr.

AGENCY FOR THE PURCHASE AND SALE OF IMPROVED BREEDS OF ANIMALS.—Stock Cattle of the different breeds, Sheep, Swine, Poultry, &c. purchased to order and carefully shipped to any part of the United States—for which a reasonable commission will be charged. The following are now on the list and for sale viz:

Thorough bred Short Horns and Grade Cattle
Do do Alderney do do
Do do Ayrshire
Do do Devons do do
Do do South Down Sheep
Do do Oxfordshire do
Do do Leicester do
Swine and Poultry of different breeds.

All letters, post paid, will be promptly attended to. Address AARON CLEMENT,
mh. 1 Cedar st. above 9th st., Philada. phia.

J. D. Benteen & Co. 181 Baltimore st., Balto.

HAVE FOR SALE a large assortment of MUSIC, and are constantly publishing and adding to their stock all the new and standard publications of the day.

Having rented an additional wareroom for PIANO FORTES, a very large assortment will always be kept for sale, from the best factories in the country, of 6, 6 1-3, 6½, 6¾ and 7 octaves, in rosewood cases, with full metalic frames, from the plainest to the most costly. Among the assortment will always be found the celebrated Pianos of Chickering, Boston, and Nunns & Clark, N. York, both of which makers received gold medals at the World's Fair in London. Also, PRINCE & Co's. ORGAN MELODEONS, intended to supply the place of an Organ in small churches, Seminaries, family worship, &c. Prices $45 and $75.

☞ Orders from the country for Pianos, Guitars, Music or any article in our line of business, will be as fully and faithfully executed as if the parties were personally present.

A liberal discount made to Dealers, Seminaries, Professors, &c. feb. 1 6t

To Farmers.

ENGLISH VITRIFIED SOCKETED DRAIN PIPES, composed of the Hardest Clays known in Europe, forming, when combined, a strength equal to Iron, and vitrified to a surface of glass and entirely proof against all corroding agents. They are in lengths of two feet, and from 2 to 24 inches diameter, with single and double junctions, &c. to match. The tests to which these and other Pipes have been subjected, have proved these to be the only drain pipes that can be relied on for strength and durability under ground.—The prices have been materially reduced, and a new supply is daily expected per ship Jane Henderson, from Liverpool, and is offered for sale in lots to suit, by the sole importers for this city, THOMPSON & OUDESLUYS,
57 South Gay street.

Who also offer for sale,

African and Mexican GUANO, in barrels, at $25 per ton 2000 lbs.; Wood's New York Bone Manure, in barrels, at 1½ cts. per lb.

☞ Analyses of the Guanos can be seen at our store.
jan. 1-3t

Mexican Guano.

GUANO—700 tons Mexican Guano, in store and for sale by STIRLING & AHRENS, 54 Buchanan's wharf, at $25 per ton of 2240 lbs.

We have the following certificate from Dr. David Stewart, who analysed this Guano: "It contains the largest proportion of Phosphates I have ever met with—where they are deficient in a soil, this Guano is cheaper and much more permanent than the Peruvian. Signed,
feb. 1-2t DAVID STEWART."

JAMES BAYNES, Wool Dealer,

Warehouse No. 105 Lombard st. near Calvert, Balto.

IS prepared at all times to give a fair market price for WOOL of all descriptions. He would recommend to farmers to be more particular in washing their Wool, and in getting it in good order before bringing it to market, to ensure them a fair price. The demand is good, and the probability is, that it will continue so the coming season. Those having wool to dispose of, are invited to give him a call before disposing of their fleeces. Any information as to putting it up for market, &c. will be freely given.

References—S. Deford & Co., and Wethered Brothers, Baltimore—Jas. Mott & Co., and Houston & Robinson, Philadelphia Ap. 1-1yr

BONE DUST—Ground Bone Dust from the Lodi Factory at $1.75 per bbl.; Pulverized Animal Carbon at 1 and 1½ cents per lb.; ditto Bituminous Coal at $1.25 and 1.75 per bbl. For sale by WILLIAM CHILD,
feb. 1-2t* No. 78 South street, Bowly's wharf.

TO FARMERS.

THE undersigned, by this method, would apprize the Agricultural community, that he is still engaged in the manufacture of the renowned *Wiley, Empire*, and other choice Plows. He also manufactures and has for sale, a number of the best and most efficient Farming Implements in use. Call before purchasing elsewhere, as his terms are such as cannot fail to please. All implements guaranteed.

☞ AGENTS for the *Wiley, Empire*, Boston, Woodstock, and other Plow Castings. A. G. MOTT.

At the old stand, No. 38 Ensor, street, and at No. 51 N. Paca street, opposite the Hand Tavern, Balt. mh-1.

Bone Dust and Poudrette.

BY the request of my customers, I have made considerable improvement in the machinery for GRINDING BONE, and am now prepared to furnish a fine article, which acts quicker and more powerfully, as I extract no glue from the Bone, or use any Chemicals, leaving the Bone Dust in its natural or pure state, weighing from 55 to 60 lbs. per bushel. The *Poudrette* is as good as can be made, and will be sold low. Apply by letter, or at the Factory on Harris' Creek, Baltimore, Maryland. THOS. BAYNES.

REFERENCE.

D. M. Perine,	Lloyd Norris,	Wm. Baker Dorsey,
G. W. Lurman,	W. B. Stephenson,	W. H. Ross,
J. Q. Hughlett,	J. W. Randolph,	Capt. C. Wright,
J. Tyson, Jr.,	T. Jef. Rusk,	Wm. S. Bond.

N. B. Orders left with the Office of the Farmer will be attended to.

☞ In December and January, I will sell my Bone Dust at 50 cts. per bushel. Oct. 1.

The Working Farmer,

A MONTHLY PERIODICAL, devoted to Agriculture, Horticulture, Floriculture, Kitchen Gardening, Management of Hot Houses, Green Houses, etc., embracing Agricultural Chemistry, Preparation of Manures, &c.

Edited by Professor James J. Mapes and published by Fred. McCready, American Institute, 351 Broadway, New York.

Terms per year, in advance, one copy,	$1 00
" " " six copies,	5 00
" " " twenty-five,	20 00

Back Volumes, in covers, at subscription prices. The Fourth Volume will commence March 1st, 1852. feb. 1-4t

Caveat Entered Dec. 20th, 1851.

TO MAKE 2 OR 3 BUSHELS WHEAT AND CORN GROW, where but one grew before, and to Fatten 2 or 3 Cattle and Sheep instead of one, are objects to interest all.

Farmers, Feeders and Machinists are requested to call at No. 95 LIGHT ST. WHARF, where the plan will be demonstrated, and a Machine to facilitate the operation can be seen and purchased from a PRACTICAL FARMER.
feb. 1

FIELD SEEDS—Just received—

250	bushels	prime new Clover Seed,	free from ripple.
100	do	do	Timothy do.
100	do	do	Orchard Grass Seed.
75	do	do	Herds do.

For sale by FITZHUGH COYLE,
National Agricultural Warehouse,
feb. 1-2t 7th street, Washington City.

A. E. WARNER, No. 10 N. Gay st.

MANUFACTURER OF SILVER WARE, FINE GOLD JEWELRY, and importer of BEST SILVER WARE, FANCY ARTICLES, &c. would respectfully invite the attention of those in want of any of the above articles, that he keeps always on hand, and makes to order, every variety of Silver Ware, fine Gold Jewelry, and best quality Silver Plated Ware, which he will sell on the most accommodating terms. Feb. 1-tf

LIME—LIME.

THE undersigned having purchased of E. J. Cooper the most extensive Lime Burning Establishment in the State, is now prepared to supply Agricultural and Building LIME, of superior quality, to farmers and others, on accommodating terms, from his Yard, at the *City Block*, or delivered at the several landings on the Chesapeake Bay and its tributaries, and pledges himself by strict attention and punctuality, and a determination to do justice, to merit a liberal share of patronage. Any orders addressed to him through the Baltimore Post Office, or left with C. W. BURGESS & Co., No. 60 South street, one door above Pratt, will be promptly attended to.
feb. 1-3t* JAMES L. SUTTON.

J. J. & F. Turner, No. 36 Pratt street,

Dealers in Guano, Bone-Dust, Flour, Grain, Feed, and Seeds.

ON hand a full supply of No. 1 Peruvian Guano (parts of several cargoes,) Nos. 2 and 3 Patagonian Guano of superior quality, containing a large quantity of phosphates.

ALSO—Fine and coarse ground Bone-Dust, superior to any heretofore introduced in to this market; Family, Extra, and Super Flour; Grain of all descriptions; Mill Feed of every grade, from Va. and City Mills; Clover, Timothy, Orchard and Herds Grass Seeds. All of which we will sell on the best terms, and hoping by a strict attention to the wants of our friends, to merit a share of their patronage. mh1-6t

ROBERT B. PORTER,

(Successor to John Buck, Jr.)

IMPORTER OF HARDWARE,

AND dealer in Bar Iron, Steel, Castings, Springs, Axles, Mill, Pit, Hand and Circular Saws; Axes, Hatchets, Wrought and Cut Spikes and Nails; Patent Horse Shoes, Anvils, Vices, &c. Agent for Rees & Hoyt's Premium Leather Bands, Goodyear's Metallic Packing—Gildea's Foundry and Smiths' Bellows, for sale on best term at

mh1 No. 58 PRATT STREET, BALTIMORE. 3t

Alderney and Improved Short Horn Cattle.

I HAVE thorough bred young Alderney BULLS, from nine to eleven months old, raised from the choicest imported stock.

Also two thorough bred young Short Horn BULLS, ten months old, raised on the farm of Mr. T. P. Remington, near Philadelphia, and for sale by AARON CLEMENT,

Agent for the purchase and sale of improved stock.

mh 1-tf Cedar st. above 9th st. Phila.

Union Agricultural Warehouse and Seed STORE.

RALPH & CO. No. 23 Fulton st. New York,

Near Fulton Market,

DEALERS in all the most approved AGRICULTURAL and HORTICULTURAL IMPLEMENTS, Imported and American Field and Garden SEEDS, Ornamental Shade and Fruit Trees, Guano, Bone-Dust, Poudrette, &c. Wrought iron Plows, Trucks, Barrows, &c. always on hand. Also, the Excelsior, or California Plow. mh. 1-3t

Patagonian Guano.

IT is deemed advisable to publish the following correspondence in relation to Patagonian Guano, as the facts therein mentioned will doubtless be of interest to dealers and consumers.

BALTIMORE, February 24, 1850.

DR. J. C. POLK, State Inspector of Guano,

Present—DEAR SIR:

You will confer a favor upon me by answering the following questions:

1st. Is it not a fact that there are more Phosphates in Patagonian Guano than in Peruvian?

2d. Is it not a fact that Phosphates are more durable in their beneficial effects upon soil than Ammonia?

3d. Is it not a fact that Phosphates in a perfect state of subdivision have an infinitely more fertilizing effect than when applied as they are found in bone-dust?

4th. Is it not a fact that Phosphates are found in a greater state of subdivision in Guano, than they could be reduced to by scientific means?

5th. Is it not a fact that to ensure a good crop, it is necessary to give to the soil, as much as possible, the constituent ingredients of the grain to be produced?

6th. Is it not a fact that Wheat, Corn, Barley and Oats contain from 88 to 99 per cent. of Phosphates?

Requesting an early answer to the above, I remain,

Dear Sir, respectfully yours,

(Signed) C. MORTON STEWART.

MR. C. M. STEWART—

DEAR SIR:—Yours of the 24th inst. is before me. I have no hesitation in answering all the questions proposed by you in the affirmative, except the fourth.

Phosphates by solution can be reduced to a perfect state of subdivision. Very resp'y,

mh. 1-1t (Signed) JOHN C. POLK.

DEVON OXEN FOR SALE.—Two pair half bred 3 year old Devon Oxen, well matched and well broke.—Apply to WM. L. BATEMAN,

61 S. Calvert street, Baltimore.

☞ For sale, a quantity of Chesnut Post and Rail Fence. mh. 1-1t

Ground Charcoal.

THIS ARTICLE is universally recommended by all Agricultural Publications, as the most powerful Absorben and retainer of Ammonia, when imported Guano is mixed with it.—It renders this manure much more durable, besides being itself a good Fertilizer.—To be had at 10 shillings per barrel, under ten barrels, or 9 shillings per barrel, when ten barrels and upwards are taken, including packages, and free from cartage, on board, at 40 Peck Slip, New York, Depot for Kentish's Prepared or Artificial Guano, a fertilizing and valuable manure, of very extensive demand. Price, $20 per ton, of 2000 lbs. Mar. 1-tf.

Circulars of the above company, containing recommendations of the Prepared Guano can be had at this office.

TO FARMERS.

THE Subscribers have in store, and offer for sale at the very lowest market rates,

PERUVIAN GUANO, imported this season in the Barque Rio.

Patagonian Guano in bags, a very superior article.

1000 bushels Ground Bone, in barrels suitable for shipping.

300 bushels Clean Clover Seed
Ground Plaster in barrels.
Prime Timothy Seed.
Reynolds' Superior Corn Sheller.
Fresh Millet Seed.
Rock Salt for Salting Stock.
Mammoth Corn for Seed.
Fish, Bacon, Tar, Renovator, &c.

They guarantee the purity of all Guano passing through their hands, and every attention given to the proper shipment of articles ordered. Address,

W. WHITELOCK & Co.

mh 4t. Corner of Gay and High streets, Balto.

GUANO.

WE are now receiving fresh supplies of PERUVIAN GUANO, from direct importations just arrived and now landing from vessels.

We have also in store a supply of No. 1 and 2 PATAGONIAN GUANO, a very superior article, containing 10 per cent. of Salts of Ammonia and 44 per cent. of Phosphates, recommended by the State Inspector and Chemists as being peculiarly adapted for stiff, clay soils, and which we can sell at a very low price.

All Guano sold by us is weighed and inspected by the State Inspector, and we *warrant* it to be genuine and unadulterated, consequently *fresh* and *full weight*.

All orders will receive our prompt attention, and forwarded with accuracy and despatch.

P. MALCOM & CO.

Corner Wood st. and Bowly's wharf, Baltimore.

P. S. We have also in store, pure BONE DUST, manufactured by Thos. Baynes, which we can sell at the maker's prices, and GROUND PLASTER, in bbls. mh. 1-3t

Ault's English Garden SEED.

JUST RECEIVED per Steamers Atlantic and Pacific, our usual supply of first rate English Garden Seeds, consisting of the various kinds of Peas, Beans, Cabbage, Lettuce, Brocoli, Carrots, Parsnips, Celery, &c. &c.—all of which are warranted of our usual first rate quality.

Also white and yellow Sugar Beet, Mangel Wurtzel, Skirving's Ruta Baga Turnip, Yellow Hybrid Turnip, Field Carrot, &c., for sale wholesale and retail, by

SAMUEL AULT & SON,

Mar. 2t. Cor. Calvert and Water Sts.

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